

THE AMERICAN FARMER

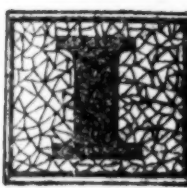
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Does Poultry Raising Pay?

By Oliver D. Shock.



IN DISCUSSING this important economic question, it is not my purpose to mislead or deceive. The principal object in view is the presentation of such facts that will have a natural tendency to encourage the farmers and breeders in making the poultry industry still more productive and more profitable.

In measuring any industry, the standard of dollars and cents is the one that should determine its value, as its sentimental phase will not in all cases be an incentive sufficiently strong to lead us onward to success. Yet it is but fair and proper to state that many of the most prosperous and successful breeders of fancy poultry were lured into the business by its sentimental features; that is, possessing the proud distinction of owning and breeding the best thoroughbred stock in a community, and thus not alone realizing self-satisfaction as its fruit, but also succeeding in gaining reward in a pecuniary sense.

Success is not an accident, however, and in the poultry yard we receive as we give—give our poultry careful, intelligent attention, proper food and shelter,



LIGHT BRAHMA COCK.

and the reply to the question, "does poultry raising pay?" will invariably be given in the affirmative. It is the too general prevalence of these opposite conditions that result in the absolute failure and consequent financial loss that very often cast odium upon this branch of agriculture. The stability of the poultry industry is fixed upon the basis of the progressive civilization of the age, and in this era of general prosperity and with the present improved and excellent strains of poultry, there are comparatively few causes to operate against our efforts to succeed.

If we could but realize for a moment the many thousands of dollars that have been made by the farmers of Pennsylvania from this source within the past decade, we would observe a row of numerals that would not alone be startling in its magnitude, but also extremely gratifying. There are too many farmers who are sumptuously on eggs in their various palatial forms who never for a moment take time to think how much money they would necessarily expend were they obliged to purchase this same, healthful, strength-giving food. While the average farmer may claim that the hens are an unprofitable adjunct of the farm, the speaker is inclined to the belief that were their owner to keep a strict account, they would soon learn that poultry raising pays, and in all likelihood they will be surprised to learn that no other live stock on the farm has yielded such a large percentage of gain, compared with the capital invested and labor expended. This point will be especially strongly and clearly proven in the present epoch of unusually low prices for wheat and corn.

One of the most encouraging signs of the times consists in the fact that many farmers are disposing of the old, antique, dunghill breeds and substituting therefor the modern thoroughbred varieties. These will soon demonstrate that while they cost no more to keep, they are far more profitable. The egg-producing capacity is largely increased, and if the stock is choice and of a desirable variety or breed, it will not be long before the

owner will have sale for breeding birds at prices more than five times in excess of those before realized from the huckster for the ordinary dunghill fowls.

Good crosses of thoroughbred fowls are becoming common on nearly every farm. It is conceded that they may be stronger and healthier than the so-called "blue-blooded" stock, but the speaker has always realized the best returns from the pure strains. Even though the purity of the breed may not enhance their value in the eyes of the indifferent purchaser, yet the increase in weight, if sold to the huckster, will materially and favorably affect the pocketbook of the seller. The speaker knows of a number of farmers who are breeding good strains of fancy poultry who claim to realize a larger net income from that source than from the leading crop of cereals on the same farm. Where intelligence and patient toil are incorporated into this fascinating industry, failures are comparatively rare.

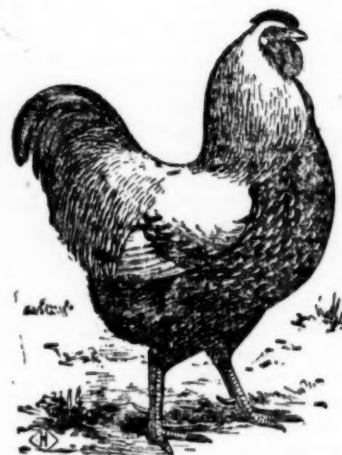
The speaker would not, however, advise the inexperienced to start into this business upon a large scale. Let the commencement be made upon a conservative footing, and as you become more familiar with the intricacies and mysteries of the poultry breeder, you can expand your yards and increase the number of your feathered pets; and unless you have learned to regard them as pets, after a year's experience in the business, you will hardly ever succeed as a poultry fancier. It is a science that is not learned in a single day.

With the development of large and improved breeds of poultry, such as the Asiatics, the business of raising "early broilers" has received a strong stimulus. Those varieties that are noted for a strong, healthy, and vigorous growth are generally selected, and many farmers are now pointing with pride to their profitable work with the incubator and brooder, and that, too, at a time of the year when there would be enforced idleness but for this recent addition to farm labor. Thousands of early-hatched chickens are now raised compared with the few scores of a decade ago.

The magnificent large specimens that adorn the market stalls are the product of specialists who have made their production a careful study. Left to their native state, the product would remain unprofitable and immature, and if placed side by side with the improved product, it is even a question whether the exacting public would care to purchase the inferior stock at any figure.

The speaker claims that there is profit in raising chickens as well as in selling the eggs. To secure the greatest profits, we must not keep chickens for their

corn, or other fat and heat-producing food, there cannot follow the large production of eggs, because corn is not an egg-producing cereal. Oats, wheat, bran, vegetables, meat scraps, ground bone—all these form most satisfactory and profitable rations. Do not permit over-feeding, thus making your fowl sluggish, but feed them regularly with a proper amount of food. It is the hen that is active and constantly scratching and searching that lays the greatest number of eggs.



SILVER WYANDOTTE COCK.

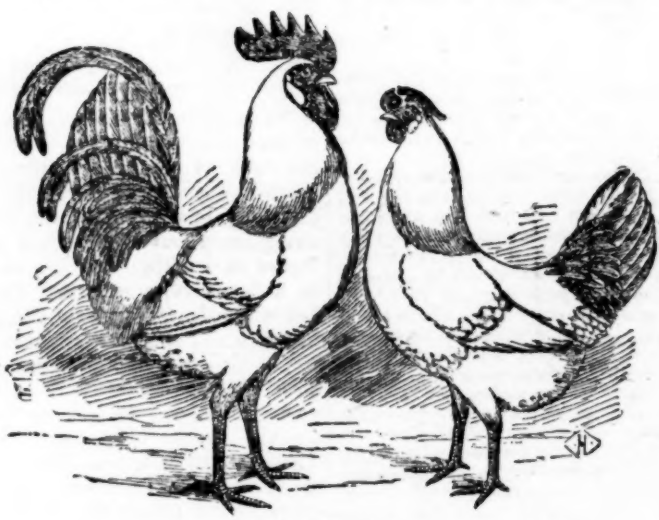
The various tests that have been made by poultry breeders with the object to determine the profitability of poultry raising have resulted in showing that the profits averaged from 50 cents to \$2 per head for a year, this wide range in margins being due not alone to the diversified manner of caring for the stock, but the best results were credited to the improved breeds of fowls. As cleanliness is an all-important factor with the intelligent and successful poultry breeder, it is unnecessary to urge the novice to remove all droppings from the poultry house daily. There are farmers who assert that the value of the hen manure gathered from their poultry houses for manurial purposes is fully equal to one-half of the cost of the food that they consumed. The Pennsylvania State chemist has recently analyzed hen manure, and the result proved that when carefully preserved its value per ton was equal to that of the best brands of complete fertilizers, to wit, about \$32 per ton.

It is the rational management of the poultry industry that insures its success. Mismanagement will even to a greater degree ruin it and render it unprofitable. While the business is an every-day affair, a succession of little duties, little trials, and little sacrifices, let us not be unmindful of our obligations, and by a little combination of mind and muscle we will certainly realize that poultry raising does pay; otherwise the large importations of poultry and eggs from our Canadian neighbors, notwithstanding a high tariff, would have been discontinued before the present time.

Mr. Schock is special agent of the Pennsylvania State Board of Agriculture, and read the above at a meeting of the Kutztown Institute.

Try the English Walnut.

THE AMERICAN FARMER has always wondered why the farmers of this



WHITE LEGHORNS.

egg-producing capacity alone, but combine the work of chicken raising with egg production. It will not be very long before the experimenter will realize actual profits, instead of merely delusive promises. The common plan of disposing of all hens after they have passed their second season, because of that theoretical nonsense that claims that hens have but a limited number of eggs to lay during their lifetime, is also partially disproved by the fact that a Black Spanish hen, nine years old, laid more eggs from February to December, last year, than any other hen in the yard.

The matter of supplying suitable rations is of the greatest importance, and one that is only too frequently misunderstood. If we overfeed them with

country did not pay more attention to the so-called English walnut. The trees will grow readily in most parts of the more southern portion of the country. It belongs to the same family as our own walnut and butternut, and would probably flourish wherever they do. The nuts bring a high price, and those raised in this country would sell better than the imported ones, since the fresher they are the better. The tree comes to its best estate in about 10 years, and thereafter goes on bearing heavily for an indefinite number of years. A few trees would give a man a fine income, with no other labor than gathering their fruit and sending it to market. The wood is also very valuable. There are quite extensive orchards in California, but we know of none east of the Pacific Slope.

FORAGE AND PASTURAGE.

The Native and Introduced Plants of South Dakota.

BY THOS. A. WILLIAMS.
Botanist Agricultural Experiment Station.



THE true grasses are the most important forage plants of our State, since they furnish practically all the native forage, and nearly all that raised by cultivation. The State has a very rich, native, grass flora, containing over 150 species and varieties. In addition to these, there are quite a number of sedges and other grass-like plants that are of more or less value on account of the forage they supply. The State is naturally divided into several distinct regions, readily recognized by the character of the flora found in each, and particularly by the grass flora.

Throughout the Sioux Valley region the blue stems predominate and form the characteristic feature of the region. Along with these we find switch grass, or false or Western red top, as it is sometimes called, particularly on the bottom lands. Muskit grass and some of the blue joints are more or less frequent. Not many years ago blue stem was much rarer than it is now; but as the country became more settled it became more plentiful, taking the place of grasses formerly common, but which retreated before the advancing tide of civilization.

Throughout the greater part of this region, particularly the lower or southern part, many of the cultivated forage plants are beginning to be grown with a greater or less degree of success. In low, moist ground timothy does well for hay in the average season. It is of much less value for pasture, however, as it will not stand grazing during the dry, summer months. Kentucky blue grass makes a good sod, stands drouth well, affords good, early, and late pasturage, and makes a fair yield of hay.



SHEEP FESCUE.

Sheep's fescue, red fescue, and hard fescue (all are perfectly hardy) are among the first grasses to furnish Spring grazing and remain green and fresh late in Autumn. None are of any value as hay grasses. Meadow fescue, tall fescue, red top, and orchard grass are good hay grasses for lowland farms, and do fairly well on relatively high, dry soils. The fescues are rather to be preferred. Smooth brome grass, and reed canary grass (a native) are the most promising grasses grown on the station grounds of late years. These grasses, especially the former, give promise of being able to withstand very severe drouth, and at the same time to make a good yield of hay, as well as both early and late pasturage.

In most cases the common cultivated grasses have yielded only a minimum amount of pasturage and very little hay during seasons of excessive drouth, but in more favorable seasons, such as that of 1892, all those named above have given paying crops of either hay or pasturage, the larger fescues leading for hay, and the smaller fescues and blue grass for pasturage.

Of the clovers, red, white, mammoth, alsike, sweet clover, and alfalfa have been tried in various parts of this region. White clover, alsike, and alfalfa are the most promising. Red clover has been quite successfully grown in the moister and more protected localities, but does not seem to be able to stand the Winters in more exposed and drier soils. Last year all four of these

clovers did very well, indeed. For the two or three years preceding none were a decided success except in the southern part of the valley, where, when once a good sod is formed, all may be successfully grown. A mixture of clover and timothy gives a better yield of hay than can be obtained from either one alone. Alfalfa makes a good growth, stands drouth well, and comes through the Winter in good condition. It sometimes suffers severely from a disease due to a fungus, which causes the leaves to drop prematurely. It seems to have more of a tendency to become woody early here than in most other States; hence, if not cut in proper season, furnishes a poor quality of feed. With proper care, however, it is one of our most successful clovers, and will certainly be one of the "stand-bys" for this State.



MEADOW BROME GRASS.

For the Sioux Valley region we can say that the following forage plants give promise of being grown with at least a fair degree of success: Blue grass, smooth brome grass, reed canary grass, timothy, tall fescue, meadow fescue, sheep fescue, red fescue, hard fescue, red top, white clover, alsike, alfalfa, and in some localities red clover.

So far as our experience goes the best method of seeding, all things considered, seems to be a thorough preparation of the ground by plowing the preceding Fall and then a good harrowing in the Spring, sowing the grass or mixture broadcast without any other crop, and covering with a light harrow or a brush drag.

Seed enough should be used to insure a good stand, if possible, the first season. If cut at all the first year it should be left quite long, so as to leave growth enough to hold as much snow as possible during Winter. If any other crop is sown with the grass, such as oats or barley, it usually keeps the grass so choked that it cannot make growth enough during the Spring and early Summer to enable it to withstand the hot, dry weather of July, August, and early September; while if no other crop is sown the grass will usually be able to make a good robust growth and be in better shape for drouth and dry Winters.

West of the Sioux Valley region is that of the Jim River Valley. The native grass flora of this region differs materially from that of the Sioux Valley, except in its southern portion, where



REED CANARY GRASS.

the blue-stem grasses are becoming quite plentiful. Throughout the greater part of this region big blue stem and bushy blue stem are rather scarce. Little blue stem is plentiful, but is of little value as forage, as stock will not eat it except

while it is very young. The characteristic grasses of this region are the blue joints and the wheat grasses, or Western quack grasses. Muskit grass is also common. Gramma and switch grass are quite plentiful, particularly the former. Buffalo grass occurs in scattered patches. Along the so-called "burn outs" salt grass (*Distichlis spicata*, var., *stricta*) is common. Of these grasses, blue joint, wheat grass, switch grass, and muskit furnish the greater part of the hay, while muskit, wheat grass, and gramma make most of the pasturage.

Formerly it was thought that this region could not grow our tame grasses successfully, but since the introduction of irrigation many farmers have proven that timothy, blue grass, clover, and alfalfa can be raised. The past season very fine timothy was grown on irrigated land near Huron. Smooth brome grass has been introduced into this region, and promises to take an important place among good, all-round forage plants.

West of the Jim Valley lies the great range region along the Missouri River. Here the blue stems and blue joints are both much less common than in the two other regions. The wheat grasses, here often called "gumbo" grasses, with Western porcupine grass (*Stipa comata*), make up by far the greater part of the hay grasses, while gramma and buffalo grass, with the two preceding species, furnish the grazing. Throughout this vast region scarcely anything has been done with tame grasses, and none can be recommended at present unless, perhaps, smooth brome grass.

In conclusion, it may be stated that in the Sioux Valley region and the countries lying along the Missouri River near the Nebraska line our hardier grasses and clovers can be successfully grown if carefully sown and tended. In the Jim Valley, where irrigation can be practiced, there is little doubt but what quite a list of forage plants can be profitably cultivated. Concerning the possibilities of the range region, but little is known as yet except that plants to be grown there will have to stand very severe drouth and rigid Winters. Much is hoped for from smooth brome grass and some of our best native grasses, as reed canary grass, and some of the wheat grasses.

Southern Rice.

Reports up to June 15 state that the rice crop in North Carolina and Georgia will probably be below the average, while that of South Carolina will be fully up to it. The plant there is looking very well. In Louisiana the planters have not planted so much as last year, but are expending their efforts in raising more to the acre, in which direction they are convinced profit lies. A large number of farmers are coming in from the Northwest and engaging in rice culture. There will be from 15 to 20 per cent. more planters this year than last. The crop is looking very well, and it is expected that it will begin to come to market in August. Reports from other States, except Texas, are unfavorable, but in Texas there will be more acres of rice, and more raised to the acre than ever before. The total rice area in the United States is placed at 263,600 acres, and the product this year estimated at 10,500,000 bushels.

The Army Worm.

The army worm, which has recently appeared on the Eastern Shore of Maryland, is the larva of one species of the owlet moth, an insect frequently found on the stalks of corn and other cereals. There are four or five generations in the course of the year. The second brood, occurring in May or June, is usually the most destructive. The eggs are hidden by the female moth at the base of various cereals or in the folds of blades of grass, usually in strings of 15 or 20. In the larval state they remain concealed by day and feed by night, and it is only when in enormous numbers that they march from field to field in search of food, which habit has suggested their popular name.

Profit from Strawberries.

Six hundred thousand quarts of strawberries, we are told, were shipped from Ridgely, Caroline County, this season, which netted the growers \$30,000 over and above all expenses. Here is certainly a crop worthy of the farmer's attention; one that promises better returns and more profit than wheat or corn.—*Easton (Md.) Star.*

Pears are one of the first crops taken off, and to get the most out of the land they should be followed by something else. Turnips, late cabbage, and potatoes are suggested as some of the crops that might follow pears.

THE ORIOLE.

The Beautiful Bird's Nesting-Habit and Home Life.

But the Baltimore oriole demands longer notice. He is a prince in a house of princes. The family to which he belongs is composed of birds remarkable either for plumage, note, nest, egg



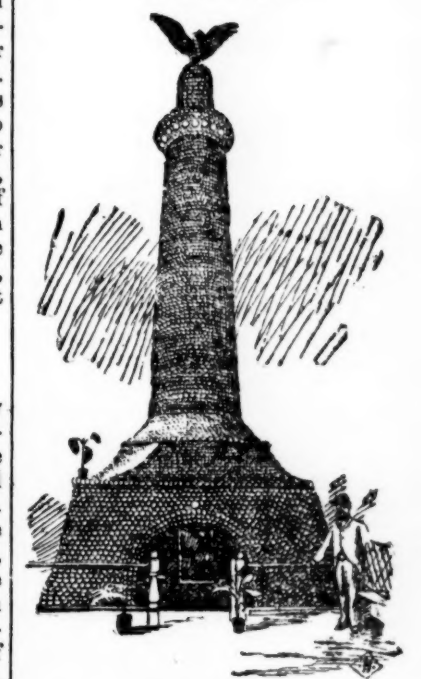
GOLDEN ORIOLE (*Oriolus galbula*).

or habit. Each can claim something curious and original; but the Baltimore shines in everyone of these particulars, for in plumage, song and nest alike he is an especially remarkable bird. When the Earl of Baltimore became the Lord of Maryland his followers quickly noticed the correspondence between his heraldic livery of Orange and black and the orange and black of the splendid bird that so abounded in the new estates, so that, very naturally, the name "Baltimore bird" was suggested and has been borne ever since.

His nest is one of the most wonderful examples of bird-weaving in existence. It is made of separate threads, strings, horsehair or strips of bark, closely interwoven into a sort of sack and so firmly knit together that it will bear a weight of 20 or 30 pounds. In the southern part of this bird's range the nest is suspended from two or three terminal twigs for protection from numerous enemies, such as snakes, opossums and the like. It is also made six or seven inches deep to prevent the eggs being thrown out by the high winds. But in the colder North, where tree-climbing fowls are rare, it is hung, not at the extremities of the branches, but in a cluster of twigs that affords shelter. It is much shallower than when exposed to the wind, but is very thickly woven and lined with soft, warm materials. The oriole's loud, file-like notes, ringing from the high tree-tops in the morning, are an ample refutation of the old theory that melody and bright plumage have never been bestowed on the same bird.—*Scribner's Magazine.*

A TOWER OF ORANGES.

A Unique Exhibit at the World's Fair from California.



Los Angeles County, California, has a tower of oranges 32 feet high in the Horticultural Building at the World's Fair. At its base the tower is five feet in diameter and tapers until it reaches four feet in diameter at the top, which is surmounted by an eagle. The whole rests on a base about 14 feet square and elaborately decorated. The sight is both pleasing and surprising, as the work of building the tower has been very artistically done. The oranges have been placed in various positions, and the skill displayed amazes the sightseer. The base is surrounded by a railing, which prevents the curious and vandals from destroying the tower by taking the fruit as a memento of the occasion.

There are many points in favor of sowing Fall rye. It keeps the ground covered in Winter, and gives a green feed for cattle before the grass is ready for pasture.



Stable Talk.

Keep the Summer stable clean and free from all odors.

Barley is one of the very best foods for horses.

Timothy is a very valuable grass, but in many sections it is sown too exclusively.

It will pay to give a little grain each day to the cattle, even if they are on pasture.

A good pasture for low, wet, and heavy soils is redtop, especially if white clover is sown with it.

If the fodder is going to be scarce this Winter, part of the oats may be cut while in the milk and cured as hay.

Work horses need a liberal allowance of grain during the working season, and a variety is far better than any one kind.

"A MERCIFUL MAN, ETC."

Some Thoughts on the Spring Care of Horses on the Farm.

The care of working horses on the farm is one that deserves, but does not receive, due attention. Horses and plowboys usually have a pretty hard time of it when Spring work begins on the farm, especially if the season is a late one in this year. The getting the crop in demands the utmost stretch of endurance and of horse and human energy. The watchword is push from sun to sun, with just let up enough to eat and sleep, but not an hour during the six working days for comfort. The teams come from the field hot, dirty, and jaded. They are watered and fed and in an hour are out and away again for the rest of the day.

When night finally comes both men and horses are too tired for any extra labor in cleaning up and examining blistered feet, galled shoulders and backs. It is not strange, then, that horses, especially colts, are found to be used up with sore backs and sweated shoulders; probably disabled and unfit for work for the balance of the Spring. It is unnecessary to blame all this upon the farmer or his help, since the work had to be done; but there should have been time for giving careful attention to and precautions against using up the horses. The following precautions would have avoided all this trouble: Horses should be unharnessed for the noon; the backs and shoulders should be carefully bathed in tepid, salty water and rubbed dry. If there are sore places, they should receive the most careful treatment and the harness adjusted to relieve the pressure and prevent further injury.

The horses should be well cleaned, rubbed down, and bedded before leaving them for the night. The feet of horses should be thoroughly cleaned out night and morning. If kept clean and shined, horses would work more comfortably, keep in better condition, and last longer for it. It would pay a man to wash his work horse at least once a week with warm water and soap, taking especial pains to wash out the mane and tail; but in every case rub the horse vigorously until dry.

The old way of feeding the team on ear corn, 10 ears at a feed, with all the timothy hay they would eat, and a run on grass from bedtime until daylight next morning, was thought to be quite proper. In fact, it was quite the exception, even with the best farmers, to do otherwise.

It is found that teams do better when kept in the barn and fed on corn and oats, with some bran and oil cake. They are cool and loose in their bowels, and their strength and appetite are better maintained. A horse so treated will go through the season's work in better condition and heart than was the rule 30 years ago. One word about working harness. It is all foolishness and imprudence to use a full, fancy set of harness on a plow horse. The harness should be light and well fitting, that is all. The use of head stall, buffers, blinds, back bands, gag reins, cruppers, and all extra weights and fixings should be done away with. Let man and horse be free, cool, and easy when working in the field.

A WORD ABOUT HORSE'S HOOFS.

Begin Treatment of the Colt's Hoofs as Soon as Born.

There is too little attention given to the hoofs of horses. In fact, nothing is done with the majority of colts until they are three or four years old, or until they have to be shod to go on the road. When this period arrives some burly blacksmith who has the muscle and grit to tackle the colt is called upon. He has usually the reputation of shoeing the worst colts in the country, which is quite a sufficient sign to bring him trade, though he knows as little about a horse's foot as he does about the dead languages. This is no exceptional case in this country, as is well known.

The colt should be handled carefully, gently, and promptly from the time it is born. Its feet should be taken up and examined for the purpose of accustoming it to future treatment.

The hoofs of colts and horses should be taken care of and directed in growth. To do this intelligently and timely re-

quires correct, well-defined ideas on the subject and suitable tools for the purpose. We quote from *Coburn's Rural World* the following very sensible paragraph: "Every colt owner should own a foot-rasp; never mind about a knife, the less a knife is used around the foot the better. The first time the smith gets at the foot he will probably cut it enough to last a lifetime. When the colt is weaned, if it has been handled and gentled, it will allow the feet to be raised and leveled with the rasp, and this should be done at least every two or three months. If the colt has a tendency to walk on the heel or frog and develop an abnormal length of toe, rasp the sole toward the toe to take away the thickness accumulating and shorten the toes. If the foot is worn at the toe, and the heels have become too high, lower the heels with the rasp so the frog will just touch the ground and receive the necessary pressure to keep the foot expanded. When a foot has kept in good shape, but the edges or rim of the hoof have grown, leaving the frog and center hollow, rasp the edges so the frog rests upon the ground lightly, or lower the heels to a level with the frog and take away the toe with the rasp in the same proportion. The more frequently the foot is put in proper shape, the more it becomes fixed in growing in that shape."

Pen Notes.

Pigs grow well on grass, clover being especially good for pasturing them on.

Filthy quarters are responsible for the greater part of the so-called hog cholera.

Give the hogs plenty of pure water and they will not drink out of their wallows.

Too much care cannot be taken during the warm weather to keep the slop barrel sweet.

There is no food so good for hogs as green clover, but a variety of food should be given at all times.

A decree that will prove of great interest to the slaughtering establishments has recently been issued by President Diaz. The decree peremptorily forbids the shipment of slaughtered hogs into the City of Mexico. Hereafter all hogs for consumption must be brought in alive. This action was taken in view of the fact that in the case of alleged fresh pork shipped here from the United States and points in Mexico it is not always possible to decide whether or not the animal died of some disease or was in a healthy condition when slaughtered.

Rings and Cholera.

EDITOR AMERICAN FARMER: Cholera, or swine plague, is the worst foe that the American pig breeder has to contend with. As long as our scientific experts fail to agree among themselves as to the nature, origin, and cure of this disease or diseases, as some claim there are two distinct diseases, it would be folly for me to enter upon a diagnosis of it and expect to gain any considerable following for my theory, for all the learned theories yet promulgated are nothing but theories, not being yet able to produce evidence of sufficient weight to establish them as fact.

Of one thing I feel assured, and that is that we feed our swine entirely too much corn, making the blood too hot, and thus deranging the entire internal machinery and rendering them less able to withstand the attacks of disease and contagion. If we would feed less corn and more bran, oats, barley, wheat, and roots, such as turnips, potatoes, and artichokes, we would have healthier pigs, and Europe would make use of much more of our pork than she now does.

In our boyhood days, when our hogs ran in the woods all Summer, we never heard of a sick pig. If our hogs of that day did incline rather too much toward the grayhound type, they were at least healthy and vigorous. I am not one of those who believe that the methods of our grandfathers were better than those of to-day, but in some things necessity compelled them to adopt measures in their farm management that it would be well for us, if the same necessity still existed. Hog rings had then never been heard of, in this country at least, and their hogs went unadorned with jewels in the nose.

In a state of nature all animals are natural physicians, and make use of the herbs and weeds growing wild around them to cure all their ills. You never heard of a dog having full liberty of disease, yet just pick up a kennel paper and see how many of our purebred ones are dying all the time. They are confined in the kennel, and do not get an opportunity to get those herbs that are necessary to their health, and man with all his boasted intelligence and learning has not yet succeeded in finding out what natural instinct teaches the dog.

The same is true of the hog. While the dog finds his medicine above ground, the hog gets his by digging or rooting it up; that is what the snout was given to him for, and he should be allowed to make proper use of it. The root of the burdock is extensively used in domestic medical practice as a purifier of the blood. Swine are very fond of it, and in soft weather I've seen them nearly bury themselves as they followed the roots downward, and I've yet to see the first

case of cholera in hogs that had access to a patch of burdock. I would no more think of raising hogs without this weed than I would think of raising them on a diet of shoe pegs.

Of course, we do not want to have our meadows and pasture fields rooted up by the hogs. That is natural and right, and can be easily avoided. They will root only when the ground is soft, and at that time they should be kept in your burdock lot, where they can dig up all the roots they want to.

I detest all rings for hogs, especially young pigs. Some ring their pigs to wean them. The rings make the nose so sore that they won't try to nurse the sow; but they will not try to eat anything else for the same reason, and as a consequence they become stunted. I've learned long since that a stunted pig never amounts to much in the feeding pen. I would prefer the old practice of cutting the nose, practiced sometimes by our fathers, to the use of any ring ever made for the purpose.

If you have a ring and a lot of rings upon hand, throw them in the river or in the bottom of the sea, and see if your hogs do not remain more healthy than they have ever been since you commenced to ring them. Rings and cholera made their appearance about the same time, and to the former, according to my belief, are we in a great measure indebted for the ravages of this much dreaded and little understood disease.—F. D. B., Wellsburg, W. Va.

A Good Scheme.

EDITOR AMERICAN FARMER: In the May 15 issue I read an article on the sow killing her young. I will give my way in avoiding the lying on the young.

The English farmers had to sell their sheep in 1892 for one-half the price realized a few years before, and wool at even worse figures. The only exception to this decline of prices was in Devonshire, where a system of mixed farming has prevailed.

New Zealand sheep raisers have been trying to raise a class of sheep that will suit both the British market, and at the same time produce a profitable fleece of wool. The experiments have led to the conclusion that a cross between the Merino ewe and the Border Leicester ram is about right.

Study the sheep carefully and individually on the shearing table. If the sheep are tabbed and recorded in your flock book, by all means compare the qualities of fleece of each one with last year, and with sire and dam. Note in column of remarks whether there is an improvement, whether the family reputation is well up to former years, and any other points that do or do not please you.

Agriculture is rapidly encroaching upon sheep raising both in the Argentine Republic and the Victoria colony of Australia. The low prices realized on the clips for the last few years and the increased demand for other farm products have led to these changes. The probability is they will continue to increase, and wool growing will either occupy the inferior lands or decline in volume. These changes were anticipated in THE AMERICAN FARMER over one year ago.

Florida, representing the 'piney woods' section of the United States, is attracting increased attention as a wool growing region, and will soon become as prominent in wool growing as the West has been heretofore. The marvelous climate, the pasturage, the cheap lands, and the something that favors the growing of fine, soft, strong wool, are certain to attract the attention of intelligent men. Here, for a time, wool can be grown cheap enough to justify; later on, agriculture will advance to that point when mutton will eclipse wool growing.

Each year the mutton industry gains in importance and in favor with the farmers of the older agricultural States. The special conditions found in Virginia, Maryland, and West Virginia are becoming better known to mutton shepherds, and it will soon be found that no region can surpass these regions in good mutton nor in the cheapness with which it is produced. Here are found to-day many successful farmers who make lamb raising a part of farm production. It is done without expensive preparations, owing to the equitable climate, and with scarcely a tithe of the expense and uncertainty encountered in New York and New Jersey.

Coarse, rough, wild grasses have been known to change the quality of Merino wool in a few months. On the contrary, the fine, soft, sweet grasses have always improved the coarser-wooled breeds of sheep. The wool market reports show a difference of value in the wools of the same grade of sheep from different sections. For convenience rather than from equity, the trade classes these domestic fleeces by States at present, and always have done so. It is worthy of note that these arbitrary gradings have been greatly modified and are continually tending to higher grades and values. It is said that Western and prairie fleeces are dirty, gritty, and string so badly in scouring as to reduce their price; and as lands are closely grazed and become set in better grasses, a sod is formed that keeps the sheep's feet from the soil and less dust raised to settle in the fleeces, and so fleeces are cleaner and lighter.

This being a fact, what can be a greater error than that any food or conditions under which they will survive is all that is required. While I shall not claim that my plan must be followed to the letter under all conditions, or that it is the only way, in future articles I shall endeavor to give in a plain, practical manner hints for observing certain sanitary conditions for health which is all essential to growth; also hints upon breeding and upon the different breeds, their characteristics and adaptability to the different conditions and markets for which they are intended.—M. H. WALKER.

Too Much Grass. The sheep farmer has a proper dread of having too much grass—a rank growth of grass in the sheep pasture in the months of June and July. The excessive rains during the whole Spring have insured an immense growth in the pastures, and may well cause anxieties unless the oft-repeated injunction to divide the pastures into lots and to confine the flock upon an area of grass that they can keep closely cropped has been followed. No flock of sheep can remain vigorous and healthy on overgrown, wet, sour pasturage.

SHEEP AND WOOL.

Shearings.

The "lambkin with wool on swab" is the handiest tool to off shoes and harness with. Try it once and you will always have them in use.

The French Parliament, ever ready to advance the interests of sheep husbandry, has appointed a commission to find out what can be done to improve their breeds of sheep.

The German Government forbids the importation of sheep from Denmark, owing to the prevalence of the foot and mouth diseases in that country.

The most important characteristic in a sheep for the American farmer is early maturity. Of course, there are values in size and qualities of carcass and pelts, but they are only secondary.

The great demand for live stock to stock up new ranges in New Zealand is said to account for the falling off of frozen meat from that country of 12,500,000 pounds during last year.

Australian meat has been selling in the Berlin market for nine to 10 cents per pound. A German syndicate proposes to regulate the price of meat by importing frozen meat from Australasia.

A late report of the statistician at Washington reveals the fact that the number of sheep in the world is 534,848,024. They outnumber the swine fivefold, cattle twofold, and horses ninefold.

The English farmers had to sell their sheep in 1892 for one-half the price realized a few years before, and wool at even worse figures. The only exception to this decline of prices was in Devonshire, where a system of mixed farming has prevailed.

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A LAMB CLUB.

A Tennessee Organization Which Has Done Much Good Work.

The statements of Col. R. A. Cartwright, President of the Goodlettsville (Tenn.) Lamb Club, are so suggestive that we offer them to farmers who are raising lambs and putting them on the market at a disadvantage, because they have no organized system of selling.

Col. Cartwright writes, June 5, 1893: "Our organization dates from 1879. We began with about 20 members; but we are now 91 members, but all of them are not active; that is, some years some of our members sell their flocks and do not furnish any lambs. Our largest sale was in 1891, when we put in at the two sales, May and June, 2,870 lambs.

"This has been the worst season since our organization on account of failure to get any grazing from Winter grain. The lambs failed to get fat, and a great many that were brought by our members were rejected by the Executive Committee.

"We delivered the 25th of May 1,475 lambs, averaging 66 pounds. This was the highest average we have had for a number of years.

"We steadily increased in number of lambs offered from time of organizing until 1891, when similar organizations were formed near enough to draw off some of our more distant members.

"It would be better for the usefulness of the club if we could still further reduce the area of our territory, as our best lambs are produced within a radius of one and a half miles from our village, the center of our operations.

"Our club has been of great advantage, however, to the surrounding country, as there is much hilly land that ought to be in grass, and the partial success of those occupying these hill lands will lead to still greater efforts to produce grass and thus make sheep farming a success with these farmers.

"Our club has been a great blessing to sheep raisers in this part of Tennessee. For the May delivery we received \$6.50 per 100 pounds, and the June delivery was sold for \$6.37½ per 100 pounds.

"For ewes to raise lambs, the native ewes are nearly exhausted and we are compelled to ship them in from other regions. We get a great many from Mississippi, Alabama, and Texas; but these are not so good as our home-grown ewes."

Code of By-Laws of the Goodlettsville Lamb and Wool Club:

Sec. I. This organization shall be known as the Goodlettsville Lamb and Wool Club.

Sec. II. Any person engaged in raising sheep may become a member by making application to the same in person, at any meeting of the club.

Sec. III. Any person who sells his wool or lambs outside of the club, shall forfeit his membership.

Sec. IV. The officers of the club shall be a President and a Secretary, who shall be elected annually at the first Spring meeting of the club.

Sec. V. It shall be the duty of the President to preside at the meetings of the club, appoint committees to transact business for the club, and to notify the Secretary to call meetings of the club whenever he deems it necessary.

Sec. VI. It shall be the duty of the Secretary to keep a record of all the proceedings of the club, to issue calls for meetings when ordered by the President, to record the names of members in a book kept for the purpose, and to keep a record of the sale of lambs and wool made by the club.

This record must be in the form of a pay roll showing the number and weight of lambs, weight and class of wool delivered by each member, and the net amount of money to which he is entitled. He shall be, ex-officio, a member of the club, and shall receive for his services \$2 for each meeting of the club, the days of delivery of lambs and wool being counted as meetings.

Sec. VII. It shall be the duty of every member to attend the first annual meeting of the club, and to report to the Secretary the probable number of lambs he will have for the first delivery.

Sec. VIII. At the first annual Spring meeting it shall be the duty of the President to appoint two discreet members to act with the Secretary as a committee to sell the lambs. The sale shall be made by advertising for and receiving sealed bids till such time as the club may direct, at which time the committee will open the bids and award the sale to the best bidder. This committee shall be at the scales on the day of delivery, and if any member of the club offers lambs that are under the weight agreed upon in the sale, or not in the condition agreed upon in the sale, he shall be the duty of the committee to reject such lambs. The committee shall hire such help as may be necessary to handle the lambs and to assist the purchaser to take them to the cars and load them. The members of this committee shall receive \$1.50 each for their services on day of delivery.

Sec. IX. It shall be the duty of the President to appoint two members to act with the Secretary to sell the wool belonging to the club at such time and in such manner as the club may from time to time direct.

Sec. X. No member of this club shall keep, or allow any tenant to keep, but one dog, and that one shall not be a bitch (an exception being made that members may keep as many fox hounds as they choose, but no other dog). The penalty for violation of this by-law shall be a tax of \$1 on each dog, and \$2 on each bitch in excess of the number allowed, and that members shall be responsible for the tax on dogs owned by their tenants. This tax shall be retained by the sale committee, out of the proceeds of the member's lambs, and the committee must not receive his lambs unless he agrees to abide by this section.

Sec. XI. All expenses of sales, advertising, etc., shall be assessed by the committee pro rata, and deducted from the proceeds of each member's lambs or wool before the pay roll is made out.—G. W. PEAY, Secretary Goodlettsville Lamb and Wool Club.

What Ails the Texas Sheepmen?

Why are the Texas flockmasters sending their sheep to market as fast as they can without regard to their condition or the state of the market? The sheep are sheared, the first and second weeks in May, 75,000 Texas sheep have been sold in Chicago, the like of which was never known before. All the markets are alike crowded with Texas sheep, and all of low grade. The wonder is that the market was not utterly demoralized. At that time Western sheep sold for \$5.25 to \$5.40; Texas, \$3 to \$5, including 1,302 heads, weighing 81 pounds, at \$4.55; 702 choice wethers, 94 pounds, at \$5.

Now, these Texas sheepmen do not know any more about the future of the sheep industry than anybody else, nor never did; but evidently they have no faith in the future of sheep and wool, and mean to get their money out of the business as fast as they can and then wait and see what will happen.

Fortunately this view is not taken by the intelligent sheep raisers in this country. There is a firm belief in the mutton industry at least, and a very decided inclination to stay by the flocks and meet the situation, whatever it may have in store. If Texas sees fit to stampede it will only leave the more room for better sheep and the future to men who have the boldness to stay by their flocks and business convictions.

A Wool Grower's Plight.

One of the largest and most successful Western wool growers gives us a very little of the inside of the sheep business from the standpoint of profit and loss. Three months ago he was hopeful that the prices of wool would be fairly good for one year at least, and maybe longer. Hear him: "I write to say that matters have changed very materially for the worse for the sheepmen all over the country within the last three months. Three months ago they did not know that they could not sell their wool, fine wool at least, at over 12 to 14 cents; but now they know it, which puts a damper on the whole wool and sheep industry.

"It is almost impossible to sell sheep at any price. Mutton markets are glutted. Good sheep are selling at three cents and a half, with no hope of getting in wool or sheep for the next two years.

"We have 700 good sheep for sale, but the prospects for selling them is exceedingly gloomy. Besides these, we have several hundred stock sheep that we would be glad to sell."

Sheep in Missouri.

According to State Auditor's report, just out, it appears that Missouri has 920,950 sheep. It is believed there are 300,000 farms in the State. If so, there is a farm over three sheep to each farm in the State of Missouri, containing 44,425,000 acres of land, and no State in the Union has such healthy conditions for sheep; the water is unequalled in quantity, softness, and purity; the grasses soft, sweet, and grow readily with the least encouragement everywhere. Then, what's the matter with the farmers of Missouri? Nothing. They are just like thousands and thousands of other farmers all over this country. They don't know how to raise sheep—they don't want to know, and are, apparently, not going to try to learn. There are lots of good farmers in Missouri, but too many are old-fashioned scrub farmers, depending upon hog and hominy; following practices, prejudices, and traditions of their fathers. Is there no remedy? Oh, yes; but it comes so slow. It will in time, and come to stay.

BEFORE OR AFTER.

An Experience in Shearing Fat Sheep and Some Wool Samples.

EDITOR AMERICAN FARMER: I saw in the last AMERICAN FARMER that you would like the experience of some of your readers on shearing fat sheep before putting them on the market. It is my opinion that it pays well to shear them, and I will tell you my reasons for thinking so. On the 1st of March I clipped about 100 sheep. I had a good place to shelter them from the cold and storms. Until that time they had been fed moderately, but after shearing I put them on a self-feeder and gave them clear shelled corn until the 10th of April. I never had sheep gain as those sheep did in all my experience in keeping sheep.

These sheep were half-blood Shropshire lambs, and weighed seven pounds per head. The wool sold for 23½ cents per pound, and brought a little over \$1.60 per fleece. Now, as the local buyers would only make a difference of \$1 per head between fat sheep shorn and unshorn, it will be seen that I gained nearly 60 cents per head by shearing these sheep. Again, I am positive that these sheep gained a number of pounds more per head by being shorn than they would have done with their fleeces on. Another point was gained by shearing; the ticks were gotten rid of, which, too, was a great help in fattening them.

The lambs weighed 102½ pounds on average with the wool off, and sold for within 100 pounds of what full-fleece sheep sold for this year.

Included please find a few samples of wool clipped from my flock of recorded Shropshire ewes. These ewes all have lambs by their side; the most of them have twins. These samples are of just 365 days' growth.—SMITH ROGERS, Michigan.

The samples of wool: There are five of these, all showing the highest characteristic of Shropshire fleeces. The shortest one measured full five inches as it lay loose on the rule, and when straightened out was a little over six inches in length. The longest sample, as it lay loose, was strong six inches, but when drawn out tight was found to be seven and one-quarter inches.

The character and condition of these wool samples would warrant the expectation of the highest market price for the fleeces which they represent. Though unwashed, and from unwashed sheep this wool is so clean and clear of every sort of matter that we would pronounce the shrinkage not to exceed 25 per cent. It is not to be wondered at that Shropshire wool leads the wool market by three to four cents per pound over fine wools.—EDITOR AMERICAN FARMER.

A Scotch company, with \$2,000,000 invested, will engage in canning Argentine meats for the European markets. The output for 1892 was 10,000 tons, valued at \$1,000,000. Of frozen meats, they shipped 25,000 tons to England and France.

Mutton and wool is our motto both for farms and ranches.

Any of our young friends can earn a watch and chain in an hour by getting six of their friends to subscribe for THE AMERICAN FARMER, at 50 cents each.

LINCOLN SHEEP.

Some Specimens of Shearings from a Thoroughbred Flock.

EDITOR AMERICAN FARMER: I take great pleasure in reading your valuable paper. It should be in the hands of every farmer. I am engaged in sheep breeding. I inclose in this a sample of wool from my Lincoln shearings. I have seven fine bucks for sale, all registered, bred from an English buck that goes to the World's Fair, Chicago, this Summer. Ewes are all full bloods from imported ewes. Please give this wool a measure. I am also a breeder of Shropshire. The sheep are on the Eby stock farm, two and a half miles east of Roanoke, Wabash Co., Ind. Four of my bucks sheared 19 pounds.—H. Z. LEONARD, London, Canada.

MR. LEONARD'S SAMPLES.

There are three: Viz., Association No. 434, shearing ewe, sheared 19 pounds of unwashed wool. This sample is 12 inches long as it lies loosely on the rule, and when stretched out straight is easily 14 inches. It is very clean, bright, and wavy; lies in ringlets.

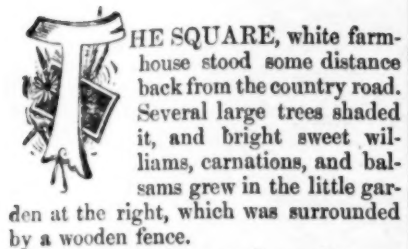
No. 433, shearing buck, sheared 13 pounds; probably unwashed; not mentioned in memorandum. The wool is perfectly clean and loose; measures 11 inches; when drawn tight one inch more.

No. 431, shearing buck; weight of fleece, 15 pounds; presumably unwashed. The sample lies loosely on the table it measures a little over nine inches; when drawn out straight it reaches 10½ inches. The quality is superb in every characteristic of Lincoln wool. It is the best molar in fineness, whiteness, and lustre.

Americans are not familiar with terms used by English and Canadian breeders, so it is well to mention the "shearing" represents the age of the sheep. A year old ram or buck is a shearing buck; a year old ewe is a shearing ewe. The samples are typical Lincoln wools.

THE FALSE LOVER

By BESSIE AINSWORTH SAFFORD



THE HOMESTEAD.

THE SQUARE, white farmhouse stood some distance back from the country road. Several large trees shaded it, and bright sweet williams, carnations, and balsams grew in the little garden at the right, which was surrounded by a wooden fence.

A grassy carriage road ran between the garden and the house to an unpainted barn with a broken weathercock on the top.

On one side of the house was a piazza, with the kitchen door opening out upon it. The front door had no steps or path leading up to it, and apparently never was used.

A shabby, two-seated buggy stood before the open side door, with a bony, faded, black horse attached to it, and an overgrown girl, with stooping shoulders and light yellow hair brushed tightly back and knotted, came out of the house and climbed into the front seat.

She had a general air of being "dressed up" for some occasion. Her ill-fitting, cinnamon-colored bunting dress showed signs of having been recently turned and made over. Her straw hat, of the same color, was ornamented with faded pink roses, and a bow of light-blue ribbon was fastened at her throat by a cheap clasp pin. She wore black mitts, and these in a measure served to hide her rough hands.

After seating herself in the buggy and taking up the reins she looked back at her mother, who stood, with her sleeves rolled up and a dish cloth in one hand, in the doorway watching her. Her mother was a thin little woman, with large, anxious eyes, and an expression of being crosswise with the world and everything in it.



THE HOMESTEAD.

"I don't see but what, at last, you look as slick and span as the other girls," she said. "When'll you get back?"

"In a couple of hours, I guess; you'd better have supper ready then. Lucia's sure to be hungry."

"The train'll prob'ly be late, it always is, but I'll be ready for you, anyhow."

Hetty clucked to her horse to move on.

"Good-by," she shouted as she passed out of the gate.

"Good-by," called her mother, and waived the dish towel at her.

The road along which Hetty traveled lay between fields of waving grain. The music of the grasshoppers and crickets filled the air, and the bushes which clung to the fences were covered with great red raspberries.

"I don't see why ma can't brace up an' be happy, now that the morgue's paid," she meditated. "I guess the reason she ain't is because I ain't like other girls—ain't got no beau or nothin', or ain't good lookin'."

While she was thus plodding along the dusty road absorbed in her own thoughts she heard someone call her from behind. She pulled up her horse, looked around, and saw her neighbor, Charley Phelps, trying to overtake her.

"Hello, Hetty," he called, "what be you a-goin' to?"

"To the village," replied Hetty, "to meet my cousin, whose comin' in on the train."

"I'm goin' to the village, too, give me a lift, won't you?" he asked.

"Sartin'," said Hetty, cordially, "jump right in."

"Thanky," said Charley, and clambered in beside her on the front seat. Hetty clucked to her horse and they jogged along comfortably together.

"Better let me drive," said Charley, taking the reins out of her hands, "it ain't proper for you to do it when you look so slick. Got a new dress, ain't you?"

Hetty blushed.

"No, it's one of ma's made over," she said, with true Yankee frankness.

"It's awful pretty, anyhow," said Charley, "and suits you, too."

Hetty blushed again, she was not used to compliments.

"I guess you're stretchin' that," she said, awkwardly.

"I say, Hetty," said Charley, after a moment's silence, "I've been a-wantin' to ask you something for a long time, an' mebbe I'd better do it now, seein' you're a-goin' to hev company, an' most likely I won't hev another chance. I've hed a place offered to me out in York State, if I'll come out an' take it. It's a real nice one, an' I could take care of you real good if you'd only let me—I mean if we was to get married."

"An' go to York state?" asked Hetty.

"Yes, little 'un, why not, we'd be happy thar."

"But ma," said Hetty, "an' the farm?"

"Leave her to take care of that," said Charley.

"Leave ma? Oh Charley, I never could."

"You might take her along," said Charley.

"But she'd die if she was to leave the farm. She was born an' raised thar, an' her father before her, and she's just now got the mortgage paid off an' can live happy."

"Well, then, s'pose we leave it to her; most prob'ly she can fix it all right."

Hetty did not answer, but looked up at him through happy tears, and he bent down and kissed her. To Hetty a kiss was a sacred pledge of love, one she could never break.

Charley took a little plain gold ring from his pocket and slipped it over the third finger of her left hand.

"Thar, child," he said, "you can wear that until I git another one for you in York State, with a real diamond in it."

When they reached the village Charley left her, and she went on alone to the station. She was very happy when she looked down at the ring.

"I've got a beau as well as the other girls now, as sure as gospel."

She was not a moment too soon. The train had already arrived, and the passengers were alighting. She got out of the buggy and tied her horse with a rope to the post in front of the door. A fat woman carrying a baby and a paper bag was coming up the platform, followed by two small children.

Behind her was a tall girl with auburn hair and a brown dress, whom Hetty recognized as her cousin Lucia. She wore a hat which she thought the most beautiful she had ever seen in her life. It was a brown one with nodding feathers.

When Hetty was alone that night with her mother she told her that Charley wanted to marry her.

"Wall, I declar," said her mother, "ain't it true that it never rains but it pours? Here we've got the mortgage paid off, an' the next thing is you've got a beau, an' I thought for sartin', things point in that way, that you never was a-goin' to git one."

"But ma," said Hetty, "he wants me to go to York State with him to live."

The pleased light left her mother's eyes.

"Oh, Hetty, Hetty!" she sobbed, "you wouldn't leave your poor old ma?"

Hetty's heart sank.

"Wouldn't you go too, ma, if things suited?"

Her mother only sobbed and rocked back and forth.

"Well, ma," said Hetty, "don't cry; I'll stay by you, anyhow."

Charley seemed to take a liking to Lucia right away. She was a good looking girl, and tried to please him. Hetty was shy and awkward, and soon began to feel rather left out.

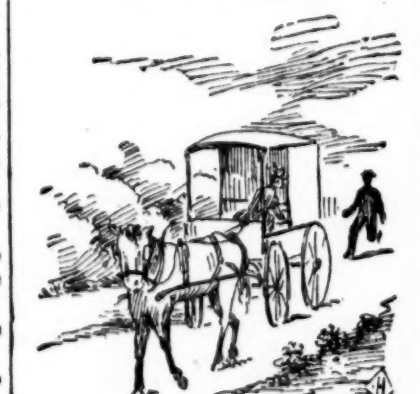
"Your beau seems to like Lucia," said her mother one day. "You'd better keep him shy of her or you'll lose him, sure as gospel."

"I ain't afraid," said Hetty, "we're engaged."

"I wouldn't be too sartin'," replied her mother, "even good lookin' folks has lost their beaus before this."

One night after the work was done Hetty went over into the garden alone. She wore her cinnamon-colored dress.

"He said this was pretty," she thought, "but I guess some carnations might make it look a little more respectable like. Lucia looks so beautiful."



THE HOMESTEAD.

After awhile she saw Charley coming toward her. He had on a new suit of store clothes, and Hetty thought he looked very handsome.

"Evenin', Hetty," he said.

"Evenin'," answered Hetty.

"I'm a-goin' away the day arter to-morrow," he said abruptly, "an' I want to know if you're a-goin' with me."

The tears sprang to Hetty's eyes.

"Oh, Charley," she sobbed, "I can't leave ma."

"But if you love me you ought to come with me; your ma ain't no right to come between us."

"Oh, but Charley, I've promised to stay by her," she sobbed.

"Well, well, don't cry," said Charley, "I guess things'll fix themselves somehow; they most always do if you give them time."

They walked together out of the garden.

"I've got to go," he said. "Good-by."

"Good-by," said Hetty, mechanically.

The next evening Hetty put on her cinnamon-colored dress again. She must look well the last night Charley was there. Lucia had walked to the little

postoffice with a neighbor and Hetty was glad; she wanted to see him alone the last night.

About 9 o'clock she went down to the gate and looked up the road. Two figures were coming slowly along, but she did not see them. Could it be possible that he was not coming to say good-by?

"Ain't you ever a-goin' to bed, Hetty?" called her mother from the door. "It ain't no use a-waitin' any more for your beau to-night. He won't come now, it's too late."

Hetty came sadly into the house and went up stairs. About half an hour later she heard Lucia come and go softly to her room.

The next morning she awoke with a start. She felt as though a heavy weight was pulling her down. She knew why. It was because Charley had not come to say good-by. It was very early, but she got up and lighted the candle. A little neatly folded note lay on her table. She grasped it with trembling hands.

DEAR HETTY: Don't be frightened when you find I'm gone. I'm going to get married. Charley wants me to. He says you can keep the ring.

It was a terrible blow. "Lord help me," she sobbed, and He did. After a while she went down stairs. An expression of pathetic resignation was on her face.



THE HOMESTEAD.

"AIN'T YOU EVER A-GOIN' TO BED, HETTY?"

"He broke his pledge that he made when he kissed me," she said to herself, "but I don't mind, and most likely I can keep it better by a-lettin him marry Lucia, an' havin' someone to look arter him, than by keepin him awaitin'. I don't know how long, for me. The diamond'll look beautiful on Lucia's hand."

"You're awful early," said her mother, yawning as she came into the room.

"What on airth hev you got thar?"

Hetty handed the letter to her silently.

"I ain't got my spees here," she said; "read it for me, can't you?"

Hetty hesitated, then cleared her throat, and read it through to the end.

"So you've lost your beau," said her mother, consoling. "Never you mind, Hetty, she added, persuadingly; "we got along before he asked you to be his wife, and we kin git along now, an' mebbe someone will come along arter you pretty soon and be satisfied to live with us."

Going to the World's Fair?

If you are, go via Cincinnati and the C. H. & D. and Monon Route. The superb train service of this line between Cincinnati and Chicago has earned for this line the title of the "World's Fair Route." It is the only line running Pullman Vestibuled trains with dining cars between Cincinnati and Chicago. The C. H. & D. has issued a handsome panoramic view, five feet long, of Chicago and the World's Fair, showing relative heights of the prominent buildings, etc., which will be sent to any address, postpaid, on receipt of 12 cents in stamps. Address, E. O. McCormick & P. T. Art., "Worlds Fair Route," 200 West 4th Street, Cincinnati O. Be sure your tickets read via Cincinnati and the Cincinnati, Hamilton & Dayton R. R.

Cuba's Sugar Season.

The sugar season in Cuba may now be considered virtually ended, as the yield of the few estates still grinding will have no appreciable effect on the total production. It is estimated that the yield of the whole island will amount to between 750,000 and 800,000 tons, a very large decrease from the average total production.

The severe drouth which has persistently prevailed since October last has not only affected the yield of sugar, but has considerably injured the tobacco crop. In several localities cattle are beginning to suffer for want of water and the grazing fields furnish little nourishment, the grass being practically burned up.

The construction of the line of the Western Railroad, which is to connect this city with Pinar Del Rio, its terminus for the present, is satisfactorily progressing and the line will soon reach Las Obas. The running of trains over the new line is delayed only by the want of bridges, which are expected shortly from abroad.

They will be erected as soon as they arrive over the Ajicmal, Paso Viejo and Guama Rivers. It is expected that within four or five weeks the new section will be opened to public traffic.

A Specific for a Head Cold.

A French savant has discovered a remedy which he claims to be a specific, and he has published the formula for the benefit of suffering humanity. It is as follows:

Salol..... 1.00 grm.
Sulphuric acid..... 30 cgrm.
Powdered boracic acid..... 4.00 grm.

At the outset of a cold in the head a pinch of this powder is to be snuffed up each nostril every hour for the first half day only. If used more frequently or longer it gives rise to an eruption of the edge of the nostrils. But the preparation can be so modified as to prevent this eruption by reducing the proportion of salol to one-half or one-quarter of that mentioned in the formula.

Read our great watch offer on another page and get up a club of six.

THE APIARY.

Hummingbirds.

That bees can be raised in the sun with some success is no proof that they do not need shade.

Nothing is so much to be dreaded in the apiary as the melting down of combs or the spilling of honey.

Be slow and careful to properly adjust frames when returning to the hive, so that the bees will not be injured.

Buckwheat can be grown on land that is not suitable for other grains, and honey made from it finds a ready sale.

Every hive of bees that does not contain a good, fertile queen is in danger of being robbed, and must be looked after.

Never stand directly over the hive when working bees at this season, and, if possible, never open the hives during the working period.

When the hives are moved again let them rest in the shade of some tree. Almost any kind of tree will be of benefit in hot weather.

The right time to place on suplus boxes is when the hive or lower story is full, or nearly so. As long as the bees have abundant room there is no need of any surplus boxes.

Use the best combs for the brood nest and the oldest and roughest near the outside for storage. Do not allow any drone comb to remain in the hive except the colonies you wish to breed from. Cut it out and insert workers' comb in its place.

It is often the case early in the season that the cluster of bees in the hive will be found to locate their brood at one side of the hive. This should be looked after in good season, so that the brood will occupy the center combs, and the frames heaviest with honey be placed nearest the outside.

When the plan of extracting the honey from the combs is followed, always allow the cells of the combs to be filled, do not allow them to be sealed over. Take out the frames, put them into the extractor, turn the reel and the liquid honey is thrown out by centrifugal force. If care is taken in handling not to injure the frames, they can be put back into the hives to be again filled with honey.

SOMETHING ABOUT POLLEN.

The Work Performed by Curious Little Vegetable Germs.

EDITOR AMERICAN FARMER: Few objects seen under the microscope are so beautiful and interesting as the pollen grains of plants. Readily gathered in the garden or in the field, their varying forms afford a most interesting study to the amateur naturalist. Each flower bears pollen of a shape peculiar to itself, so that by examining any kind of honey one can discover just what kinds of blossoms were rifled of their sweets by the bees to make it.

There are so many wonderful things to be told about pollen. Everybody knows that the "stamens" of a flower are the little stalks with yellow heads which are scattered around, but not in its center. These heads are called "anthers," and each of them contains a number of very small yellow grains, which are the pollen. Under the microscope each of these grains is found to be a single cell, which has two coats, and within the inner is a fluid. In the fluid, when mixed with water, may be seen a great many extremely minute granules, which constantly keep up a sort of vibratory motion. These granules are composed of starch and protoplasm, the latter being the germ substance of plants yet to be.

The anthers, as soon as the pollen within them is ripe, burst and scatter their contents. It is intended by nature that some of the grains shall fall upon the "stigma" at the top of the "pistil," and this is apt to happen if the anthers are situated above the stigma. But many flowers depend for the accomplishment of this upon bees and other insects, which got their bodies covered with pollen while seeking for honey, and then rub themselves accidentally against the pistils. One kind of plant is described by the botanist Gray which can only be thus "fertilized" by an actual fight between bees. However, in whatever way the result is accomplished the pollen is made to adhere to the stigma by a sticky secretion on the surface of the latter, and presently something astonishing occurs.

The outer coat of the pollen grain bursts, and the inner coat passes through it in the form of a tube, which gently enters the stigma and passes downward into the upper part of the pistil, called the "style," making its way through the latter until it reaches the "ovarium" at the bottom of the style. This ovarium is a sort of seed case formed of several chambers formed like the "fls" of an orange, in each of which is an "ovule" or seed. In fact, an orange is actually such an ovarium, and the pipisior seeds are the ovules. Each ovule has a small hole in it, as you may discover by soaking an orange seed in water, and then squeezing out the fluid absorbed, which will be seen to issue from the little orifice. It will be perceived presently how essential this orifice is to the purpose of nature.

Ordinarily, from each pollen grain several of these little tubes proceed. Some of the grains, like those of the nasturtium, are triangular, and one tube comes out of each corner, while other kinds of grain emit quite a number of tubes. The tubes passing down through the pistil to the ovarium direct themselves into the different chambers and enter the several ovules or seeds. Very often the seed is not in such a position that the tube can find its way to the orifice it seeks, but, just as it is descending, the seed always turns itself so as to receive the tube through its opening.

The granules which the pollen grain originally contained make their way down through the tubes, and some of them are conveyed into each seed. While these granules are yet within the tubes they are seen to develop into new cells, which form the rudiments of future plants.

Thus the germs are conveyed into receptacles where nourishment has been stored away for their use by the parent plant. The pulpy matter contained in the seed consists of starch and sugar, and these nutritious substances are fed upon by the growing embryo, just as the chick develops in the shell from the germ to the downy bird by absorbing the yolk and white of the egg. What food the embryo plant absorbs from the contents of the seed, however, does not for the most part contribute to form those portions which are afterward to be developed into stem, root, and leaves. The bulk of it goes to produce the temporary "seed leaves," which appear—sometimes one and sometimes two—when the growing germ, fattened upon the sugar and starch of the seed, bursts the envelope of the latter and "sprouts."

A part of the starch originally stored away in the seed is intended to nourish the young plant while the latter is beginning to grow and unable to feed itself. This portion of food is sometimes, as in the pea or bean, absorbed into the tissue of the seed leaves, which subsequently yield it up to the plant, as an infant is fed from the bottle, until the true leaves and root are sufficiently developed for its support. In other cases the reserve supply of nutriment occupies a separate receptacle, closely resembling the yolk bag of an egg. This latter arrangement is made for plants that bear one seed leaf, as well as for some that bear two, like the ash and horse chestnut. It will be observed that the vegetable, just as the animal, parent provides for its offspring until it is able to procure nourishment for itself.

Only recently has the idea found acceptance that plants possess intelligence. The natural philosopher, being unable to account otherwise for many wonderful phenomena in the vegetable world, has yielded to the conviction that trees, shrubs, and even grasses have brains or something to correspond to them. Their brains are in their roots, which seek for water with such unerring instinct and do many other things equally indicative of what may be fairly termed thought. If so much be granted, is not the operation of intelligence equally evident in the elaborate functions performed by the little germ cell whose story has been told? How wonderful it is to consider that perhaps even so minute and insignificant a thing as a grain of pollen possesses sense!—O. M., Smithsonian Institution, Washington, D. C.

The Queen Trap.

EDITOR AMERICAN FARMER: This is found in every modern apiary in which beekeeping is conducted for profit. It is a great help and is well nigh indispensable. It was invented by Mr. Alley, of Wenham, Mass., who is, in beekeeping, perhaps, what Isaac Walton was in angling—the highest authority.

The queen trap is also a drone trap, and there is no easier way to get rid of drones than to attach the trap and then when the drones are in to destroy them with insect powder. It is not a good plan to pinch to death drones near the hives. In an apiary conducted for profit—in an apiary driven, forced to its full capacity—there is no place for drones, social, musical, and harmless as they are, and there is no use for them in such an apiary, for there is no natural swarming, and when colonies are swarmed artificially they are given queens and do not raise their own queens. Therefore, as no queens are raised in the apiary, there is no use for drones.

While the trap acts as a swarming regulator, it keeps the drone crop in check. Generally, however, it is not desired to destroy all drones; they make a cheerful sound, and it is believed that the workers are more contented if a few drones are permitted to live with them.

The trap as a queen trap should go on to the hive just before the first great crop of honey comes, provided the colony has been recruited to the maximum strength; for, if it has, it will swarm as soon as the new honey begins to flow in abundance.

If the trap is in place, swarming is impossible unless the colony has provided itself with a virgin queen, for the virgin queen may pass through the trap. But this will not happen if the beekeeper knows, as ought to be the case, what is going on in the apiary in every colony. An old queen may die suddenly, and of course a new queen comes on immediately, or as soon as one can be raised; but there is at least 16 days between the loss of the old queen and the coming of the new, and in this time the beekeeper ought to learn what has happened.

But when the colony with old queen attempts to swarm the queen is held. The bees will cluster on the tree, but they will go back, for life without a queen will be brief, and the bees realize it. If it is desired to have the colony swarm naturally, now is the opportunity. The colony is on the tree and the queen is in the trap. Carry away the hive the bees have left and place an empty one where it stood, with the trap with the queen in it at the entrance. The bees will return, find a new home, and their queen waiting for them. Let the queen out of the trap and the swarming is over.

But in an apiary conducted for profit there should be no natural swarming. It is easy enough to get bees, but it is not bees that are wanted after the colonies are recruited to their full strength; it is honey that we want, and honey we cannot get in sufficient quantity if the colony is to break up and di-

vide as often as inclination or instinct prompts.

The trap should be hooked to the hive or attached to it in some way to keep it there and to allow its quick removal when necessary. If I had not seen this "with my own eyes," I might think it incredible: A colony showed signs of swarming or attempting to swarm, and at last it began to rush out of the hive through the trap. The trap was choked, and then by the force of bees behind it, it was pushed from the alighting board and fell to the ground, and as I rushed to replace it I saw the queen take flight. The colony was soon hived.

I must say a word about the queen in the act of taking flight from the alighting board. It is not often that a beekeeper sees a queen in the act of flying. It is a sight worth seeing. As she spreads her wings and sailed away, no wonder that the bees followed her. She appeared like an animated brilliant, a diamond of wondrous beauty, for the sun shone on her as she spread those marvelously beautiful wings.

Keep the trap on all Summer, but take it off every night after 5 or 6 o'clock and let it remain off all night. This gives the bees a chance to sweep the entrance clear of dust, cell-cappings, and pollen pellets that have accumulated during the day, and it allows freer ventilation during the night.

Paint the hives two coats of good paint or it may warp in the sun and rain. While the beekeeper is at work in the apiary, the trap may be removed, for if the bees swarm they may be hived, but there is a sense of security when the beekeeper is away in knowing that the bees cannot escape even if they attempt it.—JULIA ALLYN.

THE ORCHARD.

Cullings.

White lead is a good thing to use when a large limb is removed from a tree.

From five to seven pounds of evaporated fruit can be secured from one bushel of apples.

Apples from sprayed trees will keep longer than those from trees that have not been sprayed.

When spraying, see that the spray is fine, or much time will be wasted and very little good done.

By sending only good fruit to market a reputation can be made which will result profitably to the person who does so.

Care should be exercised with the newly-set fruit trees. Do not allow the soil to bake or crust too close around the stem.

With many fruits it is often advisable to sell at home at a little less price than to pack and ship to market and take the risk of selling.

If a tree is allowed to overbear, its vitality is so greatly taxed that the next season only a small and inferior crop will be harvested.

B. W. Stone, Secretary of the South Georgia Pear Growers' Association, says the yield in that section this year will be over 20,000 barrels.

Now is the time to thin those trees which are burdened with too much fruit. In an article in a recent issue we spoke of the benefits of thinning fruit trees.

Begin the warfare on borers and other fruit-destroying insects. Even if they have not made their appearance, take precautionary steps against an expected attack.

It is stated that the peach crop this year will exceed that of the year. If this is so, pears will bring a good price. Apples will be short on account of unfavorable circumstances.

An Experience With Cherries.

EDITOR AMERICAN FARMER: It was quite interesting to me to read Prof. Elliott's "Cherry Talk" in THE AMERICAN FARMER of April 15. My experience has been considerably mixed in the last 30 years. In 1863 I purchased my present home. Among the fruit on the place were about 50 fine, sweet cherries, which would give in favorable seasons quite a profit. But there were disappointments first from heavy rains, and about the time for picking the weather was very warm. The trees were loaded, but just a few days before they were ready to pick a large part of them rotted. The most money was in the Napoleon, a large cherry that was in great demand for canning. Since then I have been planting sour varieties, as there is greater demand for them, and they give better satisfaction to the buyers.

Prof. Elliott tells how the trees should and how they should not be taken up. This reminds me of my experience. My first venture was a dozen Earl of Richmond. They grew finely, and soon bore a large crop. This encouraged me so much that I ordered 100 Richmonds and other kinds from an Erie nursery. These trees were small, but had very large roots. They all grew, and have been bearing large crops for several years.

Since then I have had sent me 150 trees from other nurseries, which I got at about one-half the price that I paid for the first. The tops of the trees were the finest that I had ever seen, but they had very few roots. The result was that they have been a failure. It is much better to have small trees with good roots than large trees that have few roots or have broken roots. Small trees with good roots may be made good, healthy trees with proper care and attention, while those with poor ones dies in a few years.

So much cold, wet weather this Spring made me feel a little doubtful about the cherry and peach crop this season. Cold, wet Springs have been more harmful to the crops than cold, dry ones.—GEO. SMITH, Cherry Grove, O.

The Distance to Plant.

EDITOR AMERICAN FARMER: I am contemplating setting out an orchard of apple, pear, cherry, and a few other fruits. Will you please inform me the best distance to set these trees; also how many to the acre?—J. N. M., Elk County, Kan.

We have read a good deal about the proper distance at which the trees should be set, but we think that the directions given by Elwanger & Berry to be the best. They state that standard apple trees should be set 30 to 40 feet apart each way. On poor soils 25 feet may be enough. For standard pears and cherries 20 feet apart each way will be sufficient. Cherries will do well at 18 feet, and the dwarf-growing sorts, Duker and Morellos, even at 16 feet. Standard plums, peaches, apricots, and nectarines 16 to 18 feet apart each way. Quinces 10 to 12 feet distance. Dwarf or pyramidal pears, cherries, and plums 10 to 12 feet, though a greater distance is better where land is not scarce. The bush dwarf apple can be planted at six feet apart each way.

If trees are planted six feet apart, it will take 1,200 to cover an acre; at eight feet distance, 680; at 10 feet, 430; at 12 feet, 325; at 15 feet, 200; at 18 feet, 135; at 20 feet, 110; at 25 feet, 70; and at 30 feet, 50. The number of plants required for an acre, at any given distance apart, may be ascertained by dividing the number of square feet in an acre (43,560) by the number of square feet given to each plant, which is obtained by multiplying the distance between rows by the distance between plants. Thus, if the plant was two feet distant in the row and two feet between rows, you would be able to get 10,890 plants on the acre.—EDITOR AMERICAN FARMER.

Notes from a Successful California Beekeeper.

EDITOR AMERICAN FARMER: Our honey season here in the upper Sierras has fairly commenced, the bees are breeding very heavily, and honey is coming in very rapidly, principally from the manzanitas, maples, fruit bloom, and wild flowers. I work my bees almost entirely for extracted honey, as I find that this pays best. I try to keep down swarming as much as possible by giving bees about the right amount of comb building room, and by frequent extracting. I have about all my surplus extracting combs built between two full ones. No matter whether I use comb foundation or not, by having combs built this way a twofold purpose is gained—the bees are kept busy comb building, and they work with all their might and main to get the comb finished, and again, very straight combs are secured. If bees can be kept comb building, and the surplus honey extracted frequently, swarming can be kept down to a great extent, and the more completely that swarming is controlled, the more honey will be secured.

I do not believe in having a large number of colonies in one place; 100 colonies, if well managed, will gather all the honey in any section. In Southern California there are many apiaries of from 250 to 500 in each. As a natural consequence, they only have a paying crop once in three or four years; whereas a limited number of colonies would give a paying crop nearly every season. In my early apiary experience I believed in large apiaries, but I have proved to my entire satisfaction that too many colonies are a detriment and not a benefit.

As to the best bees, I believe in hybrids. It is true they are crosser than the pure races, but they give greater results in honey gathering. I have tried Italian and the Carniolan bees pretty thoroughly. The Carniolans, if kept pure, I think are more superior to the Italian race of bees. Carniolans being natives of a cold and windy climate, are admirably adapted to many sections of the country. In my experience with Carniolans, they always surpassed the Italians in every respect. The greater portion of apiarists of California have nothing but the hybrid bee, and these are blended and shaded into all kinds of mixtures.

The Langstroth hive, being a standard, should be adopted by every beginner. In Ventura County, this State, it is adopted there as the standard. Ventura is a very great honey County; in good seasons upwards of 600 tons are produced. The production of extracted honey predominates. Extracted honey, after being taken from the hives, is allowed to ripen in large tanks, the lengthening period of ripening being determined by the density of the honey when first gathered; honey that contains the greatest per cent of water taking longer.

All honey should be properly ripened before putting on the market. A properly ripened article of extracted honey will always find a ready sale. All honey should be put up in neat, attractive packages, and properly labeled with the producers name etc. For a local market, five and 10 pound cans are good, also glass jars and glasses. For shipping, the 60 pound cans are best, two in a case. The one pound section for comb honey here in California is fast coming into popularity, and is being very extensively used.

Apripos of honey extractors, the reversible kinds are the ones that find favor with California apiarists, and are fast superseding the old style extractors.—S. L. WATKINS, Grizzly Flats, Cal.

The rate of multiplication of which germs of contagious disease are capable is surprising. A single germ placed in favorable surroundings for growth, quickly divides into two; each of these divides into two; these four into eight, and so on, the numbers soon reaching into the thousands, and by the end of 24 hours to more than 16,500,000.

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TO ALL TO WHOM THIS PAPER SHALL COME.

Greeting: This

paper is sent you

with a view to

compare its contents, objects, and price with those of other papers, and see if you do not come to the conclusion that you ought to have it; that you cannot afford to do without it. We can assure you that if you send in your name for one year that you will find it one of the most profitable investments that you can make. We hope to make and keep it so interesting that you will think that every number more than repays you for the subscription price for a year. Please call your neighbor's attention to the paper.

A FREE TICKET

TO THE

WORLD'S FAIR.

All the readers of THE AMERICAN FARMER want to go to the World's Fair at Chicago, and we want to have them go. We will do more—we will give them help to get there. All we ask in return is that they should do some work in pushing the circulation of THE AMERICAN FARMER among their friends and acquaintances. This will be easy, for the paper is so good, so cheap, and so generally acceptable that it scarcely requires more than being brought to the notice of practical farmers in order to secure their subscriptions. Our proposition is this:

We will give a first-class round-trip ticket from any point in the United States to Chicago and return for a club of subscribers, proportionate to the distance the point is from Chicago.

We ask all our friends who want to go to Chicago to go to work at once. They can easily secure a round-trip ticket by a little work in pushing the circulation of THE AMERICAN FARMER. Mark all communications "World's Fair Ticket" and address

THE AMERICAN FARMER,

1729 New York Ave.,

Washington, D. C.

A CALL FOR A MASSMEETING IN CHICAGO.

To the Wool Growers and Other Farmers of the United States:

There will be a massmeeting of wool growers of the United States on the 28th and 29th days of September, 1893, at Assembly Hall, on the grounds of the World's Columbian Exposition at Chicago.

On the 5th day of October a meeting of the National Association of Wool Growers will be held at the same place. Farmers, wool growers, cotton planters, wool dealers—all are expected to be there in attendance in large numbers.

The purpose of these meetings is to consult and act for the common good of all, and for the whole American people, not in the interest of foreigners.

WILLIAM LAWRENCE, President Ohio Wool Growers' Association, Bellefontaine, O.

W. N. CONDEN, Secretary, Quaker City, O.

ENGLISH farmers furnished the United States last year \$1,000,000 worth of pickles. What's the matter with the American farmers? Do they lack the skill and enterprise to do this for themselves? Certain it is they do not lack the natural facilities.

WORLD'S FAIR GRANGE HEAD-QUARTERS.

It is officially announced that the National Grange, Patrons of Husbandry, have established permanent headquarters for the season at the World's Fair, where all patrons visiting the great Exposition are cordially invited to call, register, and make themselves at home. The rooms of the National Grange are Nos. 9, 10, and 11 of the Live Stock Pavilion.

Miss Alma Hinds, of Michigan, is the Office Secretary, who will furnish general information relating to the Exposition, receive mail and newspapers.

ONE MORE BIG, LONG, STRONG PULL.

Wool growers are a unit on protection.

It is the general opinion, and strengthening every day, that putting wool on the free list will be ruinous to the industry in this country. There is no time to be lost in organizing the sheep raisers and petitioning the Members of Congress to let things pertaining to wool and woolens alone. There need be no doubts about Congressmen considering the wishes of their constituents. They will listen and they will do what their people want done if they are convinced that it is the wish of the people. Let there be one more big, long, strong pull taken; let every man who keeps sheep, or who believes that wool ought to be protected, become personally interested in circulating a petition. Remember, the crisis will come with the assembling of the extra session of Congress in September next. The damaging effects cannot now be estimated; the work of years will be gone, and it will require years to overcome the smash-up—flocks destroyed, woolen factories wiped out, capital lost, enterprise disappointed and discouraged. The markets will be surrendered to foreigners, who have for years been spending millions of dollars to overthrow protection, so dear to the heads and hearts of all true patriotic Americans.

The following remonstrance is being circulated among sheepmen for signatures. If earnest, faithful work is done, the blind onslaught so carefully planned and ingeniously carried out may be prevented. If not, the crisis will have to be met, no matter how ruinous and sickening.

To the honorable Members of the 53d Congress of the United States:

Whereas, as a result of a general belief that the tariff on woolen goods will be reduced, and wool put on the free list, the price of wool is now below the cost of production; and

Whereas we believe that if wool is put on the free list, and the tariff on woolen goods materially reduced, the price of wool will be still lower; and

Whereas we cannot afford to raise wool in competition with free wool raised in countries like Australia, where the wool grower receives hand from the Government at a less rate than we pay in taxes on our land, and receives Government aid and encouragement; and

Whereas the lands of these United States are well suited to the raising of sheep, providing that we can get a fair price for our wool and mutton; and

Whereas we believe that it is to the best interest of this country to prevent the slaughtering of a large proportion of the sheep of this country, which will be the certain result of a further reduction in the price of wool, we, the undersigned farmers and wool growers, irrespective of party, do hereby petition and beg that your honorable body will make no change in the present tariff affecting the wool and woolen schedule now in force.

THE FINANCIAL OUTLOOK.

We still adhere to the opinion that the backbone of the financial stringency has been broken, and that after the 1st of July matters will improve rapidly. It seems clear to us that the depression has traveled like a storm wave over the world, beginning in Europe, and reaching this country last Fall. From that time until Spring it was felt severely in the East, and then traveled to the Interior. It still affected the East by draining it of its currency. Then it rolled on to the Pacific Coast, and the last news from there indicates that it had spent its force, and things were getting into better shape. All the banks successfully withstood the demands upon them, and the lack of confidence was only temporary.

The 1st of July is always a very trying time in financial circles on account of the large amounts that have to be paid out for interest, dividends, etc. There is every indication that this period will be passed successfully, and then money will become much easier.

The main adverse features now are the fears of the effects of the suspension of silver coinage in India and dread of what Congress may do in September. If these were out of the way, the financial sky would brighten very rapidly.

At all events, the rise in the prices of wheat, corn, oats, and cotton cannot be much longer delayed. The world must have these staples, and at higher prices than have been ruling. English buyers have already entered our market and made large purchases. The prices certainly were tempting to any man who had ready money and a desire for gain. Nothing in the commercial world is a more promising investment than grain at present prices. Home speculators are only kept out of the market by the caution of the banks in demanding such high interest for loans to carry grain and their distrust of grain as a collateral.

We wish we could speak with equal cheerfulness as to wool, but we fear that there will be no improvement in the price of wool until after it is known for a certainty what Congress proposes to do.

THE world over, the experience is that it is best to feed and finish cattle inside of two years, and sheep inside of 14 months.

CATTLE PROSPECTS.

Col. Wm. L. Black, Chairman of the Bureau of Information and Statistics in Live Stock, Fort MacKavett, Tex., writes us:

Unless something is done to check the shipment of cows to market there will soon be a more serious shortage in cattle than was recently shown to exist in hogs, and it will require several years to correct the errors that our producers are falling into for want of correct information relating to the supply and demand of cattle.

In a letter to the National Provisioner he says: "I am of the opinion, however, that we are rapidly approaching a period of exhaustion, and I base this opinion on the fact that fully two-thirds of the meat supply of this year will consist of breeding cows. It stands to reason there must be a great scarcity of steers in the country or they would be shipped to market. And when we reflect that this drain upon our producing capacity has been going on steadily since 1889, when the proportion of females was 25 per cent, it calls for very little argument to prove that we are very near the end of our supply, and I think it would be very wise if producers would hold their few remaining cows for breeding purposes alone."

"We have practically been sending our 'seed corn' to market for five years. We will soon have no seed to produce from."

"It is certainly very unfortunate that our great cattle industry has not been managed with greater accuracy, and there is no telling how many poor cattle-men have been driven into bankruptcy in the past few years for the want of proper information relating to supply and demand."

Col. Black proceeds to attack the figures which have been sent out from the Agricultural Department. In 1884, when the cattle business was at its height, the Agricultural Department reported 29,046,101 "oxen and other cattle" in the United States. This excluded milch cows, while last year the number was placed at 37,651,239, an increase in eight years of 8,505,138 head, in spite of the well-known fact that the shipments to market have been double what they were in 1884, and cattle-men have been using every possible means to reduce supply, and have resorted to spaying heifers and shipping calves in a way that was never done before.

This, Col. Black believes, calls imperatively for the passage of the bill which has been before Congress for some time for the creation of a Government Bureau of Information and Statistics of Live Stock.

There is perhaps no single industry in the United States in which more people are interested than in live stock. There is hardly a farmer in the land that does not depend largely for support on either cattle, sheep, or hogs, and to think of this great industry being permitted to languish for the want of a proper system is not in keeping with the spirit of the age we live in.

Look at the care that is used in keeping up with the supply and demand of cotton and wheat. Is it not equally important to those engaged in the buying and selling of live stock to have correct statistics relating to the supply and demand of sheep, cattle, and hogs?

THE AMERICAN FARMER entirely agrees with Col. Black, and it has strongly urged the passage of the bill of which he speaks. We shall do so again when Congress meets.

WORLD'S FAIR ENTRIES.

The dates on which entries for the various stock exhibits will close at the World's Fair are as follows:

For the Kennel Exhibit, which begins June 12, holding six days, the entries will close June 1 instead of May 20.

For the Exhibit of Cattle and Horses, beginning Aug. 21, holding 30 days, the entries will close July 15 instead of June 15.

For the Exhibit of Sheep and Swine, beginning Sept. 25, holding 20 days, the entries will close Aug. 1 instead of July 1.

For the Exhibit of Fat Stock and Poultry, beginning Oct. 16, holding 12 days, the entries will close Aug. 1.

The rule governing ownership has been modified to require exhibitors to have been owners of animals for 30 days preceding date fixed for close of entries, instead of 60 days from date of application.

THE fears in regard to the hop plant in New York seem to have been only too well founded. The lice visitation is even worse than it was in 1886, when they made nearly a total failure of the crop. Then they averaged 25 to each leaf, while now they are represented to be 10 times as many.

THE SILVER SITUATION.

The rapidly reviving feeling of confidence in commercial circles received a rude shock last Monday by the reception of the news that the Council of Hindustan had decided to close the mints to the free coinage of silver.

This action was precipitated by the steady fall of silver, the failure of the Brussels Monetary Conference, and the belief that the Congress of the United States will repeal the Sherman Act as soon as it assembles.

What the effect of this will be can only be surmised, but it had enough portentous elements in it to gravely disturb business men everywhere and renew the excessive timidity and conservatism from which they were departing.

India has been the greatest silver consumer in the world. She has a population of 300,000,000, about one-fifth the people on the globe. She has had free coinage of silver for thousands of years—from time immemorial. In fact, the Hindus were probably the first to coin metals, and did this before the Greeks, Egyptians, and Romans. They have hoarded their savings in silver—made it into personal ornaments, which replace the savings banks of other countries. Last year, out of the 152,000,000 ounces of silver produced in the world, India took 46,000,000 ounces, or nearly one-third; the United States Government bought 54,000,000 ounces, and we used 7,000,000 ounces in the arts, leaving but 45,000,000 ounces to be used by China and other nations for subsidiary and other coinage and in the arts. It will thus be seen that if India stops coining silver and the United States buying it the future of the metal looks very dark.

On the one hand it will be said that quite clearly free coinage has not helped India, for the value of the silver rupee—the standard coin of the country—has rapidly fallen. In 1884 it was worth about 40 cents, while at the beginning of this year it was only valued at 29 cents. As all the property in India is measured by the rupee, it is clear that there has been a shrinkage of nearly one-third in the short space of nine years—enough to drive the whole country into bankruptcy. On the other hand, it may be said that this seems a part of the cruel English policy of spoliation of the country. All the debts and other payments from the country to Europe will now have to be paid in a much dearer money.

The reception of the news of the demonetization brought about a prolonged and anxious consultation between Secretary Carlisle and President Cleveland, but nothing has developed as to the conclusions they arrived at, if any. Probably nothing will be done for some time, until it is seen just what the Indian Council's action has been, and what the effects will likely be. Apparently the action has been discounted in London, for the price of silver only fell four cents an ounce upon receipt of the news.

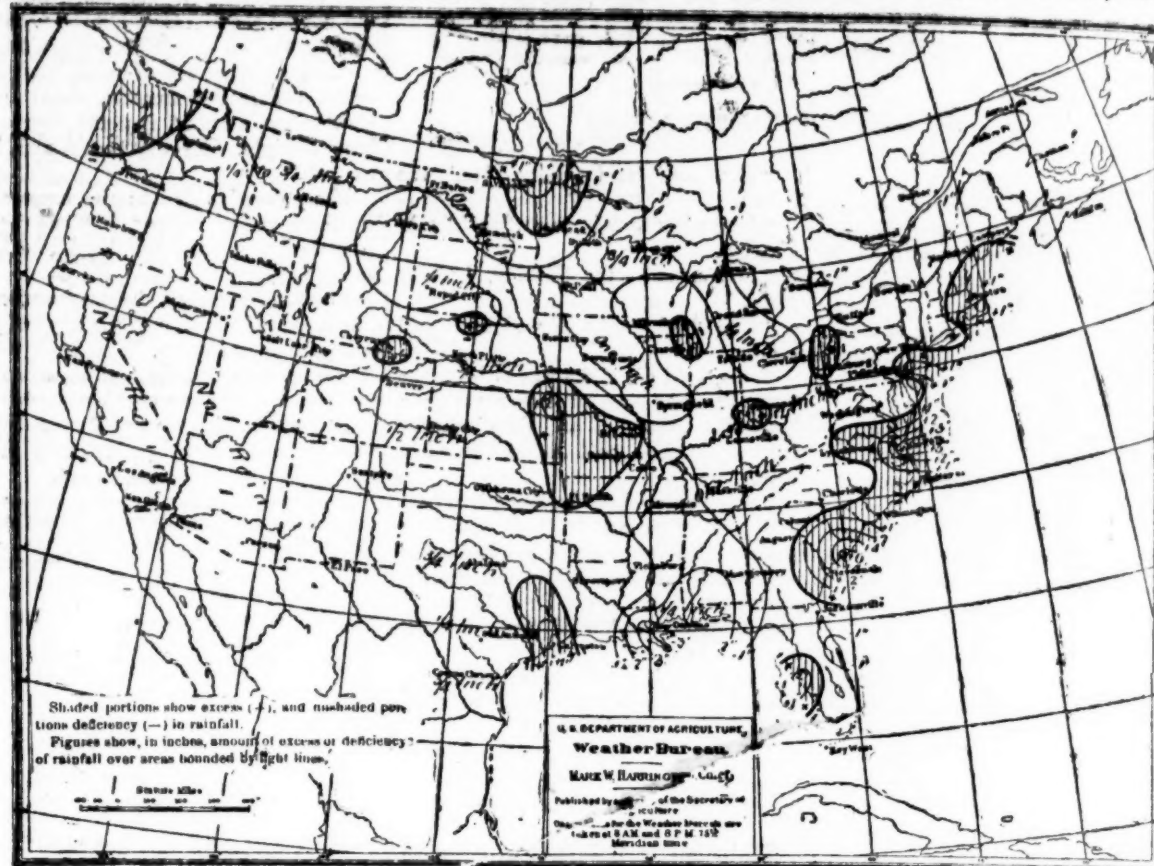
We think there will not be the serious depreciation of silver that many fear. First, because this step will greatly diminish the production of silver. There are very many mines which have worked at a small profit, or none at all, with silver at 80 cents an ounce. They will all go out of business, and no money can be had for opening up new mines. The next consideration is that the financial statement of last week showed that the principal banks of England, France, Germany, Holland, Austria, Hungary, Belgium, and Spain held altogether \$775,911,435 in gold, and \$273,926,930 in silver. That is, two-fifths of their entire holdings were silver. It is incredible to think that they will do or allow to be done anything that will seriously diminish so large a portion of their capital.

The events of the next few weeks will be full of vivid interest in this important matter.

Much interest is developing in pecan growing in Georgia. Those who are fortunate enough to have trees already bearing find them very profitable, and their neighbors are casting about to become similarly favored. It is claimed that the time for coming into bearing can be shortened from 10 or 12 years to three or four, by grafting the one-year-olds with cions from bearing trees. THE AMERICAN FARMER has always urged that more attention be given this branch of industry. The first French settlers found it profitable to plant pecan groves, and our people will find it still more so.

U. S. DEPARTMENT OF AGRICULTURE WEATHER BUREAU.

Departures from Normal Rainfall for the two Weeks Ending June 26, 1893.



PERSONAL.

Geo. E. Brock writes: "I shall start for England June 1 for my 1893 importation of Shropshires."

The firm of J. B. & W. A. Shafer, breeders of Oxford Down sheep, has been dissolved, and W. A. Shafer, Middletown, O., will continue the business.

The famous stock farm—"Erdenheim"—near Chestnut Hill and Philadelphia, which was established by the late Aristides Welch, was sold at auction June 6.

John Snell, of California, has been in the coyote-skin business for two years and is \$3,700 better off than he was. He received \$5 per scalp from the California State fund.

Ex-Gov. Glick, of Kansas, has invested in a bunch of sheep. His idea is to raise sheep that shear seven to eight pounds of wool and make a carcass of 175 to 200 pounds for mutton.

Grand Lecturer of the National Grange, Mortimer Whitehead, has just finished a series of pleasant and successful meetings with the farmers of Wisconsin, and is now at the World's Fair for a few days. He will leave there for Texas, where he has engagements until July 18, when he will go to Mississippi and remain there until Aug. 2.

At Kansas City, Mo., a letter has been received from the Hon. Minister Gray and Consul General, stating that there seems to be cause for believing that the Mexican Government will withdraw or modify the order recently proclaimed forbidding the importation of beef excepting on the hoof. Minister Gray and Consul General recently held a conference with President Diaz and his Cabinet on the subject, and received assurances that the matter would be carefully considered.

COMPLIMENTS.

The paper is just what you advertise it to be—a thorough farmers' paper.—B. R. STAUER, Elkhardt.

I think THE AMERICAN FARMER a very good paper, indeed.—DOROTHY E. HOLLO-WAY, Salisbury, Md.

I like THE AMERICAN FARMER very much, and herewith inclose one year's subscription.—MRS. M. P. MCILLAN, De Clio, O.

My father likes THE AMERICAN FARMER very well, as do all the rest who signed for it.—FRED McLAUGHLIN, East Poutney.

We are very much pleased with THE AMERICAN FARMER, and think farmers should read it from reading it.—JASPER NECHTERHOED, Michigan.

I receive the paper regularly and read it all. I like it well, as I think it is as good a farming paper as I have read since I have been in this country.—WILLIAM BROWN, Spring Lake, Fla.

You have sent me several sample copies of THE AMERICAN FARMER, and I find it quite an interesting paper. I am pretty well supplied with farm papers, but can stand 50 cents more; so you can put me on your list.—GEO. SMITH, Mahoning County, O.

I received a copy of THE AMERICAN FARMER the other day, and I think that because it is the best farmers' paper published anywhere. Please send me some sample copies to show my neighbors, and I know that many of them will subscribe.—DR. J. M. SMITH, Kentucky.

Am well pleased with THE AMERICAN FARMER. I received your favor of the 13th inst. Am pleased that you advise to go along with affairs. The watch came all right and so far has been satisfactory. It has never stopped since I started it. For a cheap watch I doubt if it can be equalled.—C. F. ELLIOTT, Greene County, O.

STILL THEY COME.

Words of Praise From Those Who Have Secured Our Watches.

D. Samuel Leonard, Thompsonstown: The watch I received of you on May 20 runs O. K., and is in every way satisfactory.

D. McGregor, Stauch: I received my watch all right. I think it is a good time-keeper and am well pleased with it.

Wm. Rupprecht, Menomonee: I am much pleased with the watch. It is a good time-keeper and better than some \$25 watches.

B. B. S., Elkhardt, Ind.: I received the watch and paper. Everything was as good as your word. The watch is a good time-keeper.

W. W. Williams, Illinois: I received my watch in good shape and I am well pleased with it. I think it is well worth the money.

Fred McLaughlin, Vermont: I received the watch all right. It has kept good time so far, and I am very much pleased with it for the money.

John Kosa, Clarkson: I received the watch in good order and am well pleased with it. It is a good time-keeper as any watch, and it is cheap at the price.

James Hallaway, Dodge County, Minn.: I received the paper and the watch and chain all right. The watch goes first rate and keeps as good time as any regulator I ever saw.

W. T. E., Wittsburg, Ark.: I received the watch and am well pleased with it. It is a good time-keeper as anyone could ask for. THE AMERICAN FARMER is the best farmers' paper that I ever saw, and I think it should be in the home of every farmer in Arkansas. If it had not been for the overflow and the enormous quantities of rain in this section, I could have gotten you a large number of subscribers around here, but I shall send them to you yet.

TEMPERATURE.

The two weeks ending June 26 were warmer than usual in all districts east of the Rocky Mountains, with the exception of the Southern States east of the Mississippi and on the southern New England coast, where the temperature was normal or slightly below.

The greatest excess in temperature occurred in the Lake Superior region, where it amounted to about nine degrees per day, while the excess amounted to six degrees or more over a region extending from the Dakotas eastward to Lake Huron. The region over which the temperature excess was more than three degrees per day includes portions of New Mexico and Texas and the entire region from Wyoming and Colorado eastward to Western New York.

In the northern Rocky Mountain region and on the Pacific Coast it was cooler than usual, the deficiency in temperature being greatest on the Northern Pacific Coast, where it exceeded six degrees per day.

RAINFALL.

During the two weeks ending June 26, the rainfall was less than the average over much the greater portion of the country, the region of excess being of limited extent, and for the most part confined to the Atlantic Coast States.

In eastern Kansas, over the western half of Missouri, in northern Minnesota, from three and a half to five inches of rain has fallen. On the west Gulf coast in the vicinity of Galveston the actual rainfall amounted to about four inches, while from Texas to nine inches have fallen on the south Atlantic coast, being heaviest in the Carolinas.

Throughout the Mississippi, Ohio, and upper Missouri valleys and generally over the Lake region, the rainfall for the two weeks has been less than usual, and on the central Gulf coast the deficiency amounts to from two to three inches. The deficiency exceeds an inch over much of the upper Mississippi and upper Missouri valleys and upper lake region. In California, Nevada, Oregon, and New Mexico practically no rain has fallen during the two weeks, but the absence of rain in those regions at this season is not unusual.

Upon the whole it may be stated that the weather conditions of the two weeks have been generally favorable, although not so prevalent to a greater or less extent in New England and the Middle Atlantic States, and in some portions of the West and Northwestern States and its effects are becoming quite serious in portions of Kansas, Nebraska, South Dakota, and Minnesota, where the damage has resulted from heavy rains in South Carolina and Georgia.

SPECIAL TELEGRAPHIC REPORTS.

New England.—Temperature below and rainfall above normal, except in eastern Maine, where drought still continues, but generally an average one generally, and some have commenced to cut; small fruits and vegetables looking well.

New York.—First portion of the week exceptionally dry and warm, latter portion cool, with showers; rain badly distributed but generally sufficient; grains fair; grass slightly injured by drought; late fruits and vegetables looking well; some crops beginning to ripen.

New Jersey.—Temperature about normal; heavy showers in all sections during last half of week and general rain to-day have greatly broken the drought condition and greatly improved the prospects of all crops; wheat and rye ready to harvest.

Pennsylvania.—Rains and cooler weather greatly benefited crops; some sections still dry; wheat ripening rapidly; corn and potatoes improving; hay and oats light; rye heading well; tobacco all set fruit fair.

Maryland.—Rains and cooler weather greatly benefited crops; wheat and hay harvests progressing; large yield of wheat; small but excellent crop of hay; tobacco planting nearly finished; some replanting, owing to damage from worms; corn well grown; peas and beans in prospect.

Virginia.—Temperature and sunshine nearly normal; rain fell in local showers, amounting to from a half to one inch in middle and western portions; light in the south; wheat and corn on Wednesday and Thursday showed slight damage; conditions generally favorable.

North Carolina.—Rainfall below normal; temperature about normal; sunshine average; weather conditions generally favorable; all growing crops doing well; corn and potatoes heading; greater part of wheat harvested, and nearly all saved in good condition; small fruits and vegetables looking well.

South Carolina.—Very little work done; cotton continues to grow; in 10 days late corn turning yellow from rain; serious drought in both cotton and corn crops expected; peaches ripening; grapes dropping; garden fine.

Georgia.—Too much rain except in northwest portion; cotton small, growing slowly, and injured slightly by June rains; wheat and oats all harvested; much fruit blown from trees; in southern districts melons ripening; shipping in progress.

Florida.—Temperature slightly excessive; showers badly distributed; crop prospects continue encouraging; corn and cotton need rain; pineapples, melons and peach shipments continue; movement of pear crop expected to begin this week.

Alabama.—Temperature and rainfall slightly below normal; sunshine about normal; cotton slowly recovering, plant still small, and several weeks behind stand of last year; corn improving; depression of insects decreasing.

Mississippi.—Temperature slightly above normal; sunshine abundant; local showers unevenly distributed; conditions generally favorable; crops clean and improving; truck plentiful.

Louisiana.—Hot, dry weather, and sunshine very favorable to crops and for killing grass and weeds; crops show general improvement over preceding week; laying out of cottonseed by labor being used on levees; cotton growing fast; corn laid by and recovering from effects of recent heavy rains; rice needs a little more rain; peaches ripening; stock in good condition.

Kentucky.—Temperature slightly deficient; sunshine normal; heavy showers well distributed; wheat harvest about completed, average crop; hay crop fine; barley and oats good.

tobacco planting nearly finished; fruit outlook unfavorable.

Missouri.—Temperature and sunshine above normal; precipitation deficient in south and east portions and excessive in northwest and central Counties; damage from wind, rain, hail, and floods in scattered areas; crop outlook improving.

Illinois.—Temperature above, sunshine normal, and rainfall below average, but fairly distributed; conditions favorable; wheat harvest progressing in the southern portion; clover and hay cutting progressing over entire State and nearing completion in southern portion; oats, corn, wheat, and melons generally fair.

Indiana.—Precipitation excessive in southern portion, and deficient in northern; average temperature and sunshine, very favorable; large crops of clover, nearly all saved; wheat harvest commenced; corn and other crops, except fruit, in good condition.

West Virginia.—Temperature and rainfall above average; wheat and hay cutting general; oats and corn promising; fruit crop fair; stock doing well; showers latter part of week increased growth of vegetables.

Ohio.—Showers advanced the growth of corn; tobacco and grass in fine condition; clover, barley, and wheat harvest progressing; wheat well filled; good quality rye ready to harvest; tobacco plants all set; general wheat harvest in progress in north.

Michigan.—Temperature and sunshine above normal; rainfall below average; the general condition of all crops is fully up to the standard; wheat, oats, corn, and rye have improved; fruits and vegetables are above the average; some small fruits ready to cut.

Wisconsin.—Weather favorable, except in north and northwestern portions, where it is too hot and dry; wheat and rye beginning to head; many complaints of worms and injury to gardens by cut worms and other insects.

South Dakota.—Temperature and sunshine above normal; rainfall considerably below average; generally rain is much needed, but sections have been relieved by showers; corn doing well; small grain and grass, except in northern sections, in good condition.

Nebraska.—Week hot and dry; small grain much injured by drought; corn not grown well, is in excellent condition and very much improved by dry weather.

Kansas.—Very warm, sunny week; rainfall ample in northeast and southeast portions; wheat harvest becoming general; corn and grass in fine condition; some crops failing in west half of State, but winds 2d.

Oklahoma.—Temperature and sunshine above normal; no rain; crops in fair condition; wheat being harvested; corn suffering very much from drought and heat.

New Mexico.—Temperature and precipitation below normal; rain needed badly in Chisum County; black beetles are damaging the potato crop.

Wyoming.—Temperature above normal; no rainfall; good growing conditions; crops but ranges and crops not irrigated are drying up rapidly.

Idaho.—Crops made but little headway during last week owing to cold nights and dry, windy weather; some crops are very much injured by frost on the 26th; wheat, rye, and barley in northern portion looking fine; hay crop promising; average of crops fair.

Colorado.—Temperature and sunshine above average, injudiciously affecting unirrigated crops and range grass; precipitation below normal; irrigated crops doing well; first crop of alfalfa is being cut; corn and other crops in good condition; melons in southern Counties; rain needed. New Mexico.—The week was very warm and dry; all crops are suffering; wheat and rye ready to harvest.

Arizona.—Temperature about normal; clear and dry weather, favorable to harvesting and to irrigated crops; streams and springs getting low; cattle and horses, hay doing well.

Utah.—Temperature slightly below normal, but sunshine throughout the week making it very favorable for growth of crops; no rain; good week for haying, which is in progress; crops will be lighter than the average; unfavorable to vegetation; rainfall, temperature, and sunshine below average; cereals in excellent condition; so is every kind of fruit except apples, plums, and cherries, which will be a short crop; more snow will be of great benefit.

Oregon.—Continued cold, cloudy weather; few rains latter part of week; crops very dry; hops growing rapidly; pea crop looking well; fruit and berry crop, except peaches and cherries, in good condition.

California.—Abnormally cool weather benefited milking out of late grain, though it retarded ripening of fruits and berries; hay doing well; excepting new yards, which are somewhat backward, frosts reported from San Bernardino, Plumas, Sierra, and Santa Barbara Counties, nipping grapes in last-named County.

M. S. W. Blandford, Chief of Weather Bureau.

NEW PUBLICATIONS.

From the Secretary, S. E. Pratt, Springfield, Ill., we have received a copy of the proceedings of the 12th annual meeting of the American Southwestern Breeders' Association, held at Springfield May 31.

The short stories and poems of William Faulkner's Illustrated Magazine for July are fully up to the standard, and the departments contain a number of well-chosen articles that deserve careful reading. "Our Young People" has a most excellent story, and the tastes of



The Girl I Loved at School.

When the mellow days of Autumn wrap the hills in purple haze
And the sun seems all the dearer for the shortness of the days,
Comes a lovely apparition through the mists of other years,
And I don't know why it is so that my eyes will swim with tears;
For I hate to judge emotions by the text-book's rote and rule,
And I only know I'm thinking of the girl I loved at school.

Of the deepest, brownest velvet are the sweetly thoughtful eyes,
And the cheeks are like the roses that the grannies used to prize;
Not the unpurposed, pinky blossoms that the hot-house man deems out,
At four dollars for a dozen and with pasteboard But the dear old damask roses that would hold their little till Yule.
Just the sort I used to gather for the girl I loved at school.

And the lips, no, no! not ruby! for the coldness of the mine
Chills the lower's burnished surface, though the fiery rays may shine
In the glazing of the gaiter; fitter far do they compare
With the glow in yonder chalice; the same fragrance lingers there,
The same thrill runs through me as when on the organ stool
I got the first and only kiss of her I loved at school.

And the form it grows distincter as the misty fall grows thin,
And the silver belt that linked her, like the serpent shutting in
All that earth retained of heaven, biases out
"How jealous fool!"
For I parted in my anger from the girl I loved at school,
And I know not if the fleeting of the purple Autumn days
Brings us nearer to the meeting than we've crossed of our ways.
Yet I think that I shall get her as the girl I loved at school.

THE WORLD'S FAIR.

What Can be Seen in the First Half Day.

To one who 18 months ago saw Jackson Park, an undeveloped expanse of meadow and clumps of forest trees, and still more to one who six months since saw the ground torn up, heaped here and there with building materials and debris, it seems that only the magic touch of a fairy's wand could have so changed it.

Too much praise cannot be given to those in charge of the vast undertaking that, undated by a phenomenally hard winter and frequent strikes of workmen, they have brought it all out so successfully.

From the time you leave your train you are constantly impressed with the idea that neither money nor thought nor work has been spared by the Boards of Managers or the people of Chicago to make visitors as comfortable as possible.

Upon arriving at the grounds you find in place of the jam you feared at the entrance that different gates have been arranged for passholders, ticket-holders, those who enter on check, etc., and that turnstiles are built so that no amount of jostling will in any way help matters on. You simply pick out your gate, take your place at the end of the line, and walk in.

When you are well in you are struck with the stillness. You had expected it to resemble a circus on a huge scale, or a stock exchange, with the accompanying din and commotion. Nothing of the kind. You have left the trolley, the cable, and steam cars far behind you; the hack driver and the street fakir parted company with you at the gate. You are in a quiet park which has blossomed into a city of broad avenues, each side of which are magnificent white palaces. There is much green grass and many trees. Roses of all varieties are in bloom. The pansy beds smile at you as familiarly as in your own side yard. In addition to the native beauties in the hundreds of acres of the inclosure, there are also added attractions of expert landscape gardening. Like towering monoliths stand the giant cacti, and at their feet trail exotic plants. There are lagoons and rustic bridges; there are playing fountains; there are swans floating around them. Nothing has been omitted that could fascinate the eye.

All along the avenues are rustic benches, and at short intervals are public fountains of pure drinking water. In the kindly shade of the buildings are grouped family parties partaking of the contents of generous lunch baskets; the older ones with a dreamy look coming into the eyes, the younger ones each eager to tell the most wonderful tale of things seen.

Grandpa is there, and somehow it seems hard for him to realize that only 45 years ago he started out of Chicago with an ox team to settle on a Government claim only a hundred miles away. Those who do not live near enough to take their luncheon with them, or who did not get a neatly packed box offered at the gate, can find a cafe in almost every building. I went to the Philadelphia, a restaurant not far from the Horticultural Building, which is commodious, well lighted and aired. It is almost as open as a pavilion, and was attractive to a solitary spectator, as the occupants formed so representative a gathering. There were six Germans, who included in their order of beer one for their waiter; near a Turk in at-

tractive costume, smoking from a long-stemmed pipe; at the next table sat some men, Americans, smoking cigarettes, with the ladies sitting indulgently waiting. In a moment four Buffalo Bill men came in and sat at the table with a minister and a half-grown son. The cowboys did not remove their hats, and the minister seemed to shrink farther and farther within his deep collar, and held the child's hand in a convulsive grasp as the man with the biggest spurs and broadest shoulders called out the order in tones that filled the entire room. One woman said it gave her an appetite to see these men eat, and ordered another sandwich. Altogether it was a fascinating picture.

Near the Women's Building is one of the public comfort parlors. At its head is a lady of culture and refinement, who has done all to make the parlors attractive and homelike. Any woman can go free of charge and rest and freshen up a bit after a forenoon of sightseeing. There are easy chairs and sofas and writing desks. There are waiting maids to serve water. If you are caught in a shower you may purchase a rain coat, umbrella, or rubbers.

The children's building, finished in gilt and baby blue, is a surprise to many. In the center on the ground floor is an open court surrounded by a railing. Here are all of the needed appliances for small boys to teach them to turn on the pole, leap, or perform the other acrobatic feats so popular among our youthful citizens. Under the same roof are parlors where mothers may leave infants to the care of experienced nurses for 25 cents a day. The gentle, kindly expression on the faces of these women bespeak good care for the little tourists left to their charge. This institution makes it possible for many women to see the Fair in comfort that otherwise would be compelled to remain at home.

Not far from the Transportation Building is Music Hall, where each day at 12 o'clock a free concert is given by the Thomas Orchestra. The building is well ventilated, is cool, with a seating capacity of 5,000. It is finished in maple, and the light is soft and restful to tired eyes and head. One can spend a quiet half hour there after luncheon listening to artistic rendering of masterpieces, and come away feeling as if one had been communing with the angels.

Fashion's Fancies.

Shirred hats are more popular than ever this Summer. They are made of the most dainty textures in all colors.

Never before has the American woman been able to wear gloves in so exact matches to gowns.

A favorite way of bringing last year's jacket up to date seems to be to add a velvet shoulder cape to it.

The new mutton-leg sleeve is larger, wider, and fuller than ever below the shoulder. It is not only placed at the arm size, but also at the elbow on the outside and inside of the arm to give it new additional volume. It is used on all sorts of fabrics, from ginghams to Lyons brocade, and for gowns of every description, from practical utility dresses to toilets designed for the most elaborate occasions.

Black and white, in all combinations, will be in style for the coming season. A cool wash hat for a little girl is made of gathered frills of chambray with a cluster of daisies where it turns up in front.



The most daring combinations are seen on all the Summer gowns, and though in many cases a dash of clashing is the result, if a little thought is given to their conception some very chic and artistic effects may be obtained at small expense.

Early Summer days produce a more refined element in dressmaking and hat building, for, with the suggestion of roses in the air, the heavier forms vanish, and filmy fabrics and blossom-laden chapeaux take their place.

A recent exhibition of purely Summer millinery showed some lovely hats that were all that the feminine heart could desire, and which would certainly prove becoming to the plainest of Eve's daughters. A charming creation was of coral pink rice straw, with an open crown and brim of yellow Vandyke lace. The sole trimming consisted of velvet roses and foliage.

FIGARO JACKET.

Cream Irish-point embroidery is used to make this jacket. Take the lace of the depth of the jacket, with the scalloped along the straight lower edge, and cut it on the double—that is without a seam at the middle. Join it, and gather it to fit at the armhole, especially at the front.



A full seven-eighths of a yard long of lace four inches wide is set around the armhole, headed by a ribbon with a bow on the shoulder. The neck is furnished with a standing collar.

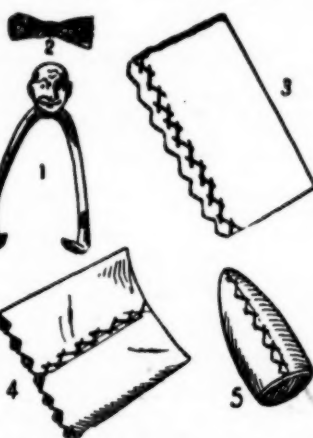
CHILDREN'S CORNER.

A Funny Old Man that Will Make Papa Laugh.

The materials required are a wish bone, red sealing wax, some coarse black thread, black ink, an old pair of kid gloves, and sewing silk that will go well with the gloves. When these materials are collected, the first thing to be done is to cut about 25 pieces of black thread, one inch long, and tie them firmly together in the middle.



(Fig. 2.) This will constitute the wig of our little subject. Then go to work on the wish-bone itself. Heat the sealing wax over the gas or a candle until soft, apply several times to the head of the wish-bone until it is sufficiently covered; then shape with the fingers, making the general form of a face, with a somewhat prominent nose. (Fig. 1.) While the wax is still soft, press the black thread into it, spreading out the threads on each side. Another dab of wax on the very top of the head will give the appearance of a bald pate with just a rim of hair around it. Cut off the ends of the hair evenly; with a pin, prick two small holes for the eyes, make a slight indentation for the mouth, and fill these with ink. The head will then be completed, and, when dry, we can go on with the work.



Form the feet by applying wax to both extremities of the bone, and shaping it to resemble feet. (Fig. 1.) Now for the dress. Cut two oblong pieces of kid from the gloves, one the length of the bone, the other a little shorter. Nick both pieces at the bottom; feather-stitch the ends of the longer piece together so as to form a pair of wide trousers (Fig. 4); slip on the wish-bone, gather at the neck, and sew firmly. The other piece may be prettily stitched around the bottom (Fig. 3) and shirred at the neck. This will give the effect of a wide cape.

An addition to the little figure can be made by cutting off half the small finger of a glove, ornamenting it with the silk, and fitting it to the head, to appear like some oriental head dress. (Fig. 5.)

This trifling and inexpensive little gift is most amusing, and certainly cannot fail to win the appreciation of the person who receives it, by its oddity and its novelty.

A Hammock for Baby.

There is no better place for baby to take his nap than in a hammock, as he is not able to fall out very easily. It allows of a free circulation of air, and there is less danger of prickly heat than if he were put in a crib or on a bed. When the Summer is hot and he won't sleep as long as he ought, swing the hammock in the yard, close him with plenty of woolen net to his skin, and you will find that the drone of bumble bee and the song of the reaper will cause master baby to prolong his siesta till the worn mother has had time to take a nap herself. There is something peculiarly soothing about the open air that will make it evident very soon that the hammock is a good invention. If you do not know how to knit one, rip up some wheat bags and make one from them. Put a stick in one end and work islets in the other for ties to be lopped through. You will now be able to bring the two sides together over the young occupant, and then by using a seiver, such as the men pin home blankets on with, you can include a generous thickness of his cloth-

ing, and thus all danger from accident is averted. A double fold of mosquito netting completes the outfit. Try it.

WOMEN'S WISDOM.

TO EVERY WOMAN:—For the present, we have this broad offer to make to all readers of THE AMERICAN FARMER: We will give a full year's subscription to THE AMERICAN FARMER to each friend who will send one-half column of suitable matter (not less than 100 words) to be published in our issue of July 1, 1893. The matter may be a new one, or it may be an extension of one already in our books. We will apply at least three tests to every article, viz.: Is it brief? Is it fresh and bright? Is it really interesting to women? Let intending contributors apply these tests before sending their matter. In range of topics these may cover everything of special interest to women. Indifferent, prosy, or stale matter is not wanted. We want to hear from our devoted women, with facts, fancies, and experiences of their own; about their household, fancy work, or the training and education of their boys and girls. The contributions may be upon one subject or composed of short paragraphs on a variety of topics. All MS. must be written on one side of the paper only. All communications for this department must be addressed to THE AMERICAN FARMER, Washington, D. C.

It Helps Us.

EDITOR FARMHOUSE: I came with other mail matter to our table a few days since, and on opening, I turned, as I always do, whatever paper I take, up to the household department first. Among other good things, I read the offer from the Editor, "To anyone who would write a half column or more for the Farmhouse."

At the earliest possible moment we, pen and I, got everything in readiness and thought to commence. But just as pen's nose went into the ink bottle the three "tests" rose up, like ghosts of all the threats that the word implies, frightening pen into the agony and making it stall. After recovering somewhat, I said, "guess we'll let the job out." Just then courage came along and whispered go ahead; what if you do fail; many others have; there will be plenty of company in the back number. So I started pen to work, coolly and out of the shakes and proceeded to business. The first idea was to wonder how many of the thousands of readers of THE AMERICAN FARMER turn invariably first to the Farmhouse column, and to how many housekeepers have they given cheer, encouragement, help, and a spirit of emulation? Could the editors know half the blessings they have carried into the homes that need them, they would feel that they had not labored in vain.

When I look back over the years to the time when such a thing as a department for women and the household in a paper was unknown, I can realize a wonderful change in woman's condition for the better, especially in the country homes. To a wide-awake-ever-on-the-alert housekeeper, there are inestimable benefits lurking in those pages. Let the number grow into legion of those who are willing to impart as well as receive.

Then everybody will get some hint or recipe or bit of experience from somebody that will meet just their needs.

REGIS.

To the correspondent who asked about rug making, and who wished to know of substantial rugs with the least outlay of time, I will tell how an industrious old lady of my acquaintance makes them. She cuts her rugs as if for a carpet, sewing them either hit and miss or the colors separately; then looks or chooses a pattern, and with a wooden book made by one of the boys, making them round, square, or tray shape, and with the bright colors they are handsome and very durable. Those made with mostly cotton rags she lines with some heavy material, lacking at intervals to keep them together when shaken, sometimes tufting them with white cotton or colored yarns. One rug that she made entirely of woolen rags in strips she finished at the edge with fringe raveled on the selvedge side of old ingrain carpeting, raveling both sides of a strip cut five inches wide, folded through the middle and leaving a half inch for heading, using the ravelings for tufting. They are much more easily made than the old-fashioned braided rugs and quite durable. There must be some way of working rags into rugs. I will give another at another time. If "Barkus is willing!"—LORENE HALL.

A Voice from Illinois.

EDITOR FARMHOUSE: Here is a nice, healthy drink for sick or well. Take one egg, beat it well; pour into a glass tumbler and fill with cold, sweet milk, and sweeten to taste. Beat the white of an egg and sugar and place on top of milk. Some kind of favoring can be added if liked.

Maybe some of the ladies would like to earn some money this Summer at home. This is the way I made about \$30 last Summer. I got jelly glasses and filled them with apple jelly made by the following recipe: Cut the apples up, peel and core, and wash them well. Do not hurt anything if not rotten. Put in porcelain kettle and cook till quite done. I put in just enough water to cover them. Then strain through a cloth—common flour sacks washed out are the best. Add granulated sugar and my jelly was clear and very nearly set through it. Proportions: Four cups of sugar to eight of apple juice. Boil till it will drip from spoon. I sold my jelly by the dozen glasses to my groceryman, who carries them with a strong apple odor, but any good cooking apples will answer the purpose.

Here is a recipe for a nice roll cake: Two eggs, one teaspoon of sugar, one and one-fourth cups of flour, four tablespoons of cream, two teaspoons of baking powder. Leave the one-fourth cup of flour to stir the baking powder in. Stir in the baking powder and flour last. Bake in long, narrow bread pan, and while hot take out and spread with jelly and roll. I will tell you about an odd vase I saw the other day. It was home-made and very pretty. Take a small jar holding about a quart—a stone jar—cover it all over with putty. Have ready all kinds of little trinkets. Stick them all over it close together. The one I saw had everything from a pin to a shoe buckle. When filled with flowers, it was a beauty. If you do not find the waste basket I will send more shortly.—MRS. CLARA HARLOW BENNETT, Charleston, Ill.

An End in View.

It is impossible for a well man or woman to be even moderately happy without an object ahead. There is no greater wrong that a parent can commit than to bring up a child in indolence. Hardly one is born whose observant parent may not detect a special trait to be strongly inherent. It does not follow that this is to be the child's life work, as so many are apt to think; but it does indicate along which lines the child may be most easily led to habits of industry. How many mothers there are, and especially those who have borne the heaviest burdens, who think they are conferring a great favor on a daughter to keep her from learning how to do this or that. Never was there a more vicious idea inculcated. Not until she has mastered every detail of housework is she fit to take upon her the responsibility of any man's home. Let her learn it gradually, profiting always by experience and experimenting of those older than herself. You may think that only matrimony is regarded as her future state. You are wrong.

No woman has any right to marry for the sake of a home or to get someone to support her. She ought to-day to be absolutely self-supporting if circumstances should make it necessary for her to leave her home or if she is not needed

there. In addition, then, to the little plain home accomplishments which every country girl may have at the age of 16 for no expense, she must also have some other one thing in which she may excel. In this her natural taste and aptitude should be considered; some girls may spend a lifetime at the piano and yet never succeed as a music teacher.

Let her take a normal course, or a similar preparation in a kindergarten training school. Better still, and this is a position that time will see filled by country girls entirely, a course in manual training; nature has given them a constitution, and habits a set of nerves that will fortify them for this life. If not any of these, then dressmaking may be perfected at the nearest modiste or millinery at the County seat.

Why not study into the science of beekeeping? Why not get up a reputation for poultry raising and be able to ask and get 75 cents apiece for squabs or \$2 a dozen for hen's eggs? Then there is horticulture and floriculture, at which women almost always succeed. All on this latter list are considered very healthful employments for women, and especially to country-bred girls, as they call for exercise, and outdoor exercise to which they from childhood have been accustomed. At any rate, do something, if it is nothing but sewing for the poor. Not so much what it may do for them, perhaps, but for a purely selfish motive what it will do for you.

Home Table.

SOME WAYS OF PREPARING VEAL. The cook's greatest use of veal is not to build the main part of a meal upon, but rather as a foundation for many dainty small dishes.

It is a necessity to the first-class cook in making stocks, both white and brown, for sources of all kinds. The poorest parts of veal may be utilized in some delicate dish. The brains, the liver, the sweetbreads, and even the tendons of veal are esteemed delicacies. The meat of the leg, which in full-grown beef is the comparatively tough round, is the fillet of veal—one of the daintiest parts.

In the last score of years we have learned the value of sweetbreads in this country, and they are no longer thrown away as they once were. But there are many other small pieces of veal which make very appetizing dishes (if properly prepared) at a very small price, and their merits are yet comparatively unknown to the average housekeeper. Of these the breast of veal is perhaps the best known, yet it is very little used.

Every part of it, except the fat and hard bones, may be made into appetizing food. For breakfast, the breast may be boned, trimmed free from fat, and cut in small squares of about two inches. These squares should be simmered in stock slowly until they are so thoroughly tender that they may be easily pierced in all parts with a larding needle. They should then be pressed and should remain in press for eight or 10 hours, so that it is necessary to make the stew the day before it is to be served. In the morning skim off any grease which may have risen to the top of the stew. Take the pieces out of press and heat up the liquid in the saucepan. Thicken it with a teaspoonful each of flour and butter mixed, taste it to see that it is well seasoned, and let it simmer again for 10 minutes. Replace the veal in it and let it warm up. When thoroughly heated dish the pieces in a circle and pour the gravy over them.

If you wish a very ornamental dish, place a mound of green peas or a mound of well-browned potatoes in the center of the platter and arrange the pieces of veal around it. These "tendons" are perfectly tender if properly stewed and pressed the day before. They are gelatinous and melting, full of succulence and flavor. They are very nice dipped in egg and fine bread crumbs and fried and served with tomato sauce.

Calves' liver may be made so very delicate a dish that it is a great mistake to cook it in a coarse way. When it is fried in bacon fat, as it ordinarily is, it simply absorbs the rankest part of the bacon and becomes grease-sodden. Calves' liver, served with bacon, should always be broiled. Select a fresh, fine calf's liver, one that weighs about a pound and a half. Let the butcher cut it in rather thin slices. Throw it in cold water for 15 minutes to whiten it, drain it, and wipe it dry with a cloth. Season it with salt and pepper, and rub it with oil on both sides. Put it in on a gridiron and broil it for six minutes on each side. Serve it with six or eight thin slices of bacon, fried for about two minutes, till they are crisp and brown.

Calves' brains may be very easily prepared for the breakfast table. They should be blanched the day before. For a family of six, procure the brains of two calves. Put them in ice-cold water for about an hour. Then remove the thin skin which covers them. They should be very clean and white, without any bloody veins. Wash them in cold water and drain them, taking care not to bruise them. If they seem in danger of falling to pieces, tie a piece of muslin around them; but this should not be necessary. Then put them in a saucepan and cover them again with cold, clear water. To a quart of water add a teaspoonful of salt, a half cup of vinegar, half a carrot, sliced, a bay leaf, six whole peppers, and a sprig of thyme. Let the brains boil very gently for about 20 minutes. When they are done, drain them and again put them into cold water. When they are cold cut each brain into two or three pieces and roll them gently in yolk of egg and then in fine breadcrumbs, and fry them in hot fat. Serve them with tartare sauce. This is simply a Mayonnaise sauce, to which a teaspoonful of dry mustard and two small cucumber pickles are added to every yolk of egg used.

HOT CROSS BUNS.

One and three-quarter pounds of flour, four ounces of sugar, four ounces

butter, two eggs, six ounces currants, one-eighth ounce caraway seeds, one-quarter ounce mixed spice, essence of yeast, seven-eighths pint of milk, one ounce lemon. Dissolve the yeast in water, which must be a little warm, stir in a little flour, then stand before the fire to rise; mix in all the ingredients except the sugar, which is added last; let it stand a short time; mix in the sugar, put it into shapes, put them on a tin, cross them, wash over with egg; let them stand a few minutes, then bake in a quick oven for 10 minutes.

OMELET.

Chop one raw onion very fine and put it in a saucepan with an ounce of butter. Take one ounce of small squares of salt pork, cook them slightly, adding an ounce of scraps of finely-minced, cooked roast beef, the same of ham, and a pinch of chopped parsley; stir in a tablespoon of stewed tomato, strained, a tablespoon of bread crumbs; season with a pinch of pepper and a third of a pinch of salt. Make a plain omelet of 12 eggs, the whites beaten very stiff, separately from the yolks, salt to taste, and a tablespoon of milk added gradually. Place eggs on a hot spider scantily greased with butter, fold up one edge, fill it with preparation, fold over other side, and serve.

BREAD CRUMBS.

Never allow yourself to think or allow your servant to think that you can afford to waste a crumb of good bread or anything else. Cold bits if daintily saved may be made into the most tempting dishes. To the French much of the credit of teaching the rest of the world the art of making over dishes.

As soon as the semi-weekly baking is over and the new supply of bread has cooled, every scrap of the old bread should be removed from the bread box, the box wiped out, and once a month scalded out and thoroughly dried before the new bread is put in it. The large pieces may be cut into diamond or heart shaped pieces to be used in decorating stewed chicken and other dishes. All of the pieces, large and small, must be roasted till every bit of moisture is gone. Some housewives keep these bits in a cheese cloth bag so that the air can pass to them freely. While the large pieces, as half a loaf, are most profitably used in dressing or for toast, the crust is usually pared off and is put with the crumbs. These are invaluable to the cook, as aside from the puddings and cakes they help to make, they are especially needed to bread chops, fish, and croquets.

If you would know how delicious a bread pudding may be, take a cup of these bread crumbs, pour a quart of boiling milk over them and let them stand for two hours, until the crumbs have become thoroughly soaked out in the milk. Pass the milk and bread crumbs through a colander, then add the yolks of four eggs, well beaten, a scant cup of sugar, a heaping tablespoonful of butter, and the grated rind of a lemon, using only the thin, yellow skin on the outside. Beat all the ingredients well together and bake the pudding in little custard cups, or in a large pudding-dish set in a pan of boiling water. When the pudding is baked, spread a layer of currant jelly over it. In order to do this successfully, the jelly must be melted in a little water and spread over the pudding when the latter has cooled a little. Now make a meringue of the whites of the four eggs, beaten to a stiff froth, with a scant cup of powdered sugar and the juice of a lemon. Heap the meringue over the pudding, covering it with irregular hillocks. Put it in a slow oven, where it will become slightly browned in 20 minutes. Serve it when cold with a sauce of sweetened cream.

If you wish a hot bread pudding, take a half pound of these dried bread crumbs, pour about a quart of scalding hot milk over them, and let them swell for two or three hours. When they are cold, add a quarter of a pound of beef marrow, chopped fine, or if this is not convenient, a quarter of a pound of the best kidney suet, also chopped fine. Add six eggs, well beaten but not separated, half a pound of raisins, stoned, half a pound of currants, half a pound of sugar, and three ounces of citron, cut in shreds. Beat all these ingredients well together and mix in a cup a tablespoonful of mace, one of cloves, a tablespoonful of cinnamon and a grated nutmeg. Bake the pudding for two hours in a slow oven and serve it hot with a rich sauce made of butter and sugar creamed and seasoned with lemon or nutmeg.

CHARTREUSE OF FOWL.

This dish takes its name from the French monastery, where it is supposed first to have been eaten. Take two small fowls, squabs, goslings, partridges, or broilers, and after singeing, drawing, and washing thoroughly inside and out, dredge slightly with salt, rub butter over the breast, and put in a quick oven to roast for 10 minutes.

Have ready a young cabbage which has been plunged into scalding water and allowed to boil for five minutes. Cut this into quarters and take out the center and fold the leaves around the birds. Pour into the dish in which you have placed them the broth from the dripping pan in which they were roasted a pint of beef stock, add a carrot, an onion, three liberal slices of salt pork, with salt and pepper to taste. Let them cook in the oven one hour in a covered dish.

To make the chartreuse, take a smooth dish, a tin pail will do; butter the bottom and sides and cover the bottom with slices of turnips which have been cooked separately and some of the pieces of carrot that have been cooked with the birds. Put over these a layer of the cooked cabbage and a layer of the boned fowl, and so on alternate layers of cabbage and fowl till the mold is full. Place the pork on top, then press down sufficiently to admit of another layer of cabbage. Place in a moderate oven with the door open for 20 minutes and then turn from mold and serve.—SARAH GODING.

THE HOUSEWIFE'S DEPARTMENT.

We offer below a large assortment of useful articles for the special benefit of our lady readers. In the preparation of this list we had in view particularly the wants of the women. In making up the assortment we have expended a great deal of time and pains in the examination of the largest stocks of goods in the New York market. We have been able to secure many things not to be found at all in our country stores, and in all cases we have secured the goods at the lowest possible price for the retail price for the same class of goods.

LADIES' BLAZER SUIT.

Just the Thing for Traveling.

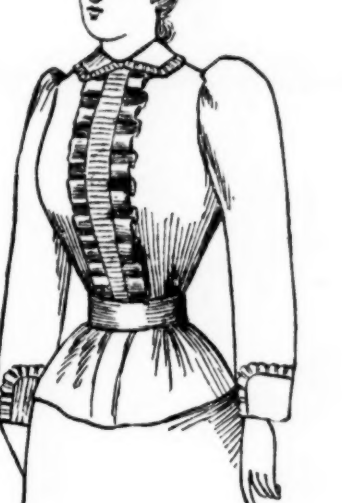


We have just arranged for a line of Ladies' Blazer Suits in flannel and serge, either dark blue or black. This suit is well made and consists of a jacket, skirt, and gilet. The jacket has well-sewn welt pockets and a buttoned flap. The skirt is made of the same material and has a buttoned flap. The gilet is made of the same material and has a buttoned flap. We can furnish this suit as follows:

No. 145—Navy blue or black flannel suit..... \$5.35
No. 146—Navy blue or black serge suit..... \$5.35
No. 147—Navy blue or black flannel suit..... \$5.35

The postage on either of the above is 40 cents, which amount please send with your order. Or, we will send suit by express, the charges to be paid by you.

WAISTS FOR BLAZER OR ETON SUITS.



IN ALL TEXTURES AND PRICES.
No. 100—In fine polka dot satin, double breasted, ruffled down the front, light and navy blue..... \$1.00
No. 101—Finest colored lawn, finished with shirred ruffles around the neck and down the front, light blue, pink and navy blue..... \$1.00
No. 102—Striped, double breasted, ruffled down the front and narrow pointed ruffles around collar and cuffs; white, with grayish-blue stripes..... \$1.00
No. 103—Striped, double breasted, ruffled down the front and narrow pointed ruffles around collar and cuffs; white, with grayish-blue stripes..... \$1.00
No. 104—Striped, double breasted, ruffled down the front and narrow pointed ruffles around collar and cuffs; white, with grayish-blue stripes..... \$1.00
No. 105—Striped, double breasted, ruffled down the front and narrow pointed ruffles around collar and cuffs; white, with grayish-blue stripes..... \$1.00
No. 106—Striped, double breasted, ruffled down the front and narrow pointed ruffles around collar and cuffs; white, with grayish-blue stripes..... \$1.00
No. 107—Of the best percale, double breasted, ruffled down the front and narrow pointed ruffles around collar and cuffs; white, with grayish-blue stripes..... \$1.00
No. 108—Japanese silk, lined with percale, finished with three ruffles around the neck. Full length, so as to be worn with any skirt; belt of same. In cardinal, with black pin bands, or navy blue or black with white dots..... \$1.00
Postage on each 10 cents extra.

THE ETON JACKET SUIT



Is just out, stylish and becoming to young ladies especially. Appropriate for outings. It consists of jacket, skirt, and pointed gilet. It is well made and neatly finished. It may be had in black or blue in flannel or serge, in any size from 32 to 42 inches bust measurement. It will be furnished to any subscriber at the following prices:

No. 145—Navy blue or black Eton suit of flannel..... \$5.35
No. 146—Navy blue or black Eton suit of serge..... \$5.35
No. 147—Navy blue or black Eton suit of flannel..... \$5.35
Postage 40 cents extra; or, if sent by express, the receiver pays charges.



AMATEUR DUCK RAISING.

How the Ducklings Should be Fat-
tened and Prepared for Market.

VII.

The first day I do not give any water; the second day, and from that time, water is furnished them in galvanized iron tanks that, inverted in tin plates, allows them the water they need and no more. Some such contrivance is absolutely necessary, for with an open drinking vessel they will get completely drenched, stop the water all over the pen, and besmear themselves with filth. After the third day I feed three parts meal, by bulk, to one part bran, thoroughly scalded. At the fifth day I begin their regular feed of two parts Indian meal to one part bran. From the second day they have had chopped cabbage, chopped green rye or grass at every feed. On the sixth day I begin to feed a teaspoonful of beef scraps that have been well scalded and soaked for 24 hours. I gradually increase the proportion of scraps until at the 10th day I am feeding 10 or 12 per cent. Boiled vegetables can now be used at discretion, but I usually mix them with an equal amount of meal and bran, equal parts.

Every third day after the eighth I add one-half pint of bone meal to every pail of feed in the morning. When 10 days old, if mild weather, or 14 days, if cold, you can safely drive them into division No. 2. And now comes their great advantage over chicks. Two hundred ducklings can safely be left alone without artificial heat, for they never kill each other by "huddling." They have a tendency at this age to plaster their heads and necks with feed, often filling their eyes in so much that these organs become very sore. I remedy this by allowing them on very mild days to have a shallow pan of water, about one inch in depth. In this they will bathe with beneficial results, but must never be left at the time, or some may be drenched and chilled. If the weather is cold do not try the bath, but wash the affected eyes with a damp rag, and then moisten with sweet oil. From the third day to the 35th ducklings should be fed once in two hours. From the 35th to the 45th, once in three hours. The remaining time to the 65th day, three times a day. You must be very punctual and very regular. You should not, if possible, vary a minute from the regular time, for gormandizers as they are, it takes but little to unsettle their appetites, and this point must be strictly heeded. Never allow a particle of food to remain before them after they have finished eating.

Often ducklings in their eagerness for food, when first given them, will trample with their broad feet and "spat" the dough into a hard, level mass. When this occurs, owing to the peculiar formation of their bills they cannot obtain any more feed, and will walk away apparently satisfied; but if you will take a stick and immediately scrape the boards, giving the dough a rough, uneven appearance, the ducklings will again "fall in." Continue this as long as you see that it is necessary, and even after that I have found that they will continue to feed from your hand or a paddle long after they have refused that which is on the boards. Here, then, is a great secret in feeding ducklings. As long as their appetites are good, ravenous in fact, you may assure yourself that all is going well; but the very instant their appetites fail, then look out. Consider you can put two or three pounds on a duckling in twice as many days. Consider again that he can as readily lose that number of pounds if not rightly tended.

As your price in the market depends wholly upon the size and fitness of your ducklings, it is a matter of some moment to you if out of 70 days required for his growth there have been several in which he has had no appetite. About feathering time your ducklings will evince a decided uneasiness as night approaches. The least unusual thing will put the whole flock in a panic, and they will often "row" around all night. Always light and hang up a lantern before dark, or you will frighten the "wits" out of the birds. The 40th day begin to increase the amount of meal and decrease the amount of bran until by the 50th day you should be feeding clear meal, with 15 per cent. beef scraps, and every third day one-half pint of bone meal to every pail of feed, with green food but once a day.

A chicken's flesh should be yellow; a duckling's, on the contrary, should be white meat. For that reason it must not have green food for once a day when fattening. Your ducklings have now been for some time, of course, in division three. About the 60th day it becomes necessary that the largest ones shall "quack their last quack," so that the flock may all be in the market before they are nine and a half weeks old; for then the pin feathers will start, they will grow poor and be unfit to eat. Select the best looking birds, disturbing the flock as little as possible, always handling them by the neck and never by the leg or wing. If they are too "rolly-polly," lumps just between and back of the legs, the bird is fat and fit to kill. It will require some practice before you will be an expert in this matter. Do not hang the bird up, but

rest yourself, holding it between your knees, with the left elbow on its back and the thumb and forefinger grasping lower mandible, the ends of each being inserted just enough to hold the bill open. Advance a sharp-pointed knife down the throat until just a trifle back of and under the eyes. Make a quick, sweeping cut across. If this is properly done, the bird will not even wince. Now grasp the upper mandible with the right hand, legs with the left; lower the head and allow it to bleed "well out." Be sure that it has done this, or blood will follow the feathers and the carcass will be worthless.

When the blood stops flowing strike a smart blow on the head with a "billy." If there is no expert near you, you must do your own picking. An expert will pick over 100 ducks in a day. You, probably, will have to be satisfied if you pick less. Save the body feathers and down; spread them in an airy room, leaving them there for a number of weeks, and occasionally turning them like hay. I pick off a good share of the body feathers first, then remove the rest and the down by holding the skin tight with the forefinger and thumb spread apart with one hand, while with the other I roll the thumb over the end of the forefinger with a quick, snapping motion, allowing it to slide up the finger at the same time. Pick half way up the neck and leave feathers on the tips of the wings. Tie a piece of twine around the bird, confining the wings smoothly against body, then throw it into a tub of ice water to cool off and harden up for market.

The season of the year is not the only thing that governs the price of poultry in the market. You must build your own first-class reputation as a shipper. You cannot afford to do otherwise, if you intend continuing in business. When such a reputation has become firmly established there will be a call for your products. One man who has been successful says: "Some will say that everybody is going into poultry, but don't be afraid of that. There is always plenty of room at the top for all of us. What you should strive to do is to raise a better quality of goods than your competitors, and then you will have more. Work up a reputation for yourself, for always have the best, and your customers will come to you instead of your seeking a market for your goods." Poultry should always be sorted and properly graded, each quality by itself. A few pairs of fowls out of condition mixed with choice, dressed poultry will invariably have its effect on the better birds.

[The End.]

Poultry Briefs.

The Guinea fowl is of inestimable value to the poultry keeper who has trouble from the intrusion of hawks about his premises. A Guinea will drive the largest hawk away, even attacking it with no thought of harm, and their peculiar chattering when danger of any kind approaches foils all attempts of thieves, birds, animals, or human beings. Try them.

The climate of middle Tennessee, where I am now located, affords a grand opportunity for poultry keeping, because the Winters are so very mild, six weeks being the limit, and zero weather when it does come lasts but a few hours, or a day at the farthest. Eggs and poultry can be produced all Winter long, when prices in our Northern markets are at high-water mark. There are many good opportunities to make poultry raising profitable here to an enterprising person.

Eggs have this month sold down to seven cents in this Southern market; these, however, the farmer disposed of to a dealer, the retail price being 10 cents. There are opportunities of making handsome profits in buying up eggs and placing them in cold storage for higher prices. Thousands of dozens go North each week from this State to the packing houses in Cincinnati and Chicago, where by skillful packing they keep until prices advance and good returns on the original investment is obtained. There are handsome profits in this branch of the egg business.

The fight a hen will display when a snake shows itself is really amusing. She tries to attack it, timidly, making such a fuss about it that it frightens the snake about as much as anyone, and it gets out of the way as quickly as it can, seldom if ever attacking its frightened victim, although at one swallow some of the young chicks may disappear, making a meal for the hideous reptile. Snakes like eggs also, and will suck them at every opportunity.—C. Murfreesboro, Tenn.

To Break Sitting Hens.

EDITOR AMERICAN FARMER: Seeing so many questions asked and answered in your valuable paper, I take the liberty of asking what is the best, easiest, and surest way of breaking hens from sitting?—EDWARD MAYERS, San Antonio, Tex.

It seems to us that everyone has a method of their own to prevent hens from sitting, but the one which has had the best results is the confining of the broody hens in a yard with a cockerel alone for company. In a few days the hen will have given up her broody inclinations.—EDITOR AMERICAN FARMER.

SUMMER POULTRY POINTS.

Trixie Tells How the Fowls Should be Treated in Warm Weather.

EDITOR AMERICAN FARMER: Poultry needs special management in warm weather as well as in cold; the same care in Summer as given in Winter will always result in loss.

We should feed corn and corn meal abundantly in cold weather. It is healing, has a tendency to heat up the blood; hence its appropriateness as a Winter food. In warm weather the blood is already too hot, and we must so feed as to keep the temperature of our fowls' bodies as low as possible; therefore, corn should be fed very sparingly in the Summer.

Ground oats and wheat bran should constitute our main warm weather ration. If mixed with milk so much the better, but be sure and mix it up dry enough to crumble readily between the thumb and finger. Soft and sloppy food should never be given fowls at any age, and it is especially injurious when fed to young chicks.

Give them plenty of fresh water for drink, and don't neglect to keep the drinking vessels clean and sweet. Sour drinking vessels and impure drinking water are the cause of nine-tenths of the diseases of the poultry yard. If you have any milk give your fowls some daily; any kind, be it sweet, sour, clabber, or buttermilk. It is valuable for poultry, especially the young chicks and laying hens.

Shade is as essential in Midsummer as a warm house in Midwinter. Plant morning glory, squash, gourd or grapevines upon one side of your yards, and train them so as to form an arbor. It will be highly appreciated by your fowls. Or you may make a shed by laying a few poles across your yard and covering them with weeds and grass.

Trees in the yards are a great benefit by furnishing shade, and there is no reason why the poultryman should not secure a good crop of fruit upon the ground he devotes to his poultry. The poultry yard is a fine place in which to plant plum trees. If you have not already done so, don't let another planting season pass by without filling your yards with fruit trees.

If your fowls are kept in close confinement, as they must be during the breeding season, you should give them green food daily. An easy and good way to do this is to spade up one-half of the yard and sow it in some kind of grain, fencing the hens off of it until it is about two inches high, when you should turn them upon it and sow the remainder of the yard. By the time that the first is consumed the first should be again sown, and continue as long as they are kept in confinement.

The worst enemy of the poultryman in Summer is the louse. Be as vigilant as a Paris detective, lice will appear in our houses some time during the season, and the careless and lazy poultryman soon finds his flocks literally eaten up by this pest. Choleas is frequently accused of killing off our fowls, when, in fact, it is nothing but lice that is causing the sad havoc in our yards.

When lice appear we must get at them at once, and not leave a stone unturned until we have conquered, and not one is left to mourn for its departed kindred. It matters not what we use to this end, so that it is practical and effective; but I'll give you my favorite mode of procedure; perhaps it may be new to some of you.

Take a common flour dredge and fill it with some good insecticide (I prefer the carbolic insect powder), catch each and dust them completely, turning the feathers back with the hand, so as to be sure of getting some of the powder upon each feather. Remove the fowls after this dusting to new quarters, not infested with lice, and gather up all the litter upon the floor and burn it up, then close the house up tight, get an iron pot, place it in the house, build a fire in the pot, pour three or four pounds of sulphur upon this fire, beat a hasty retreat, closing the door after you. Leave the house closed up 24 hours. Open air, and give the entire inside a good coat of whitewash, forcing the whitewash into every crack and crevice. Burn all the old nests, saturate the nest boxes outside and in with kerosene oil and make new nests. If you can get some tobacco stems build your nests upon them. If these are not available, then mix a quantity of sulphur or insect powder through the straw of which the nest is made. Remove the roosts and swab them with kerosene, getting as much upon them as possible, then touch a lighted match to them. The kerosene will kill the lice, and by burning it off you do not run the risk of the kerosene making the feet of your fowls sore, as it frequently does when liberally used upon the roosts.

Sprinkle the floor with diluted carbolic acid, remove the droppings often, and sprinkle the carbolic acid under the roosts after removing them. Before returning the fowls examine each one closely, and if you discover a single louse that has escaped death dust each one again with the insect powder. If you have done your work well you are now rid of the pests, and all that now remains for you to do is to use whitewash liberally every week or two and proceed as often as you did in the first place with the roosts. All this takes a good deal of labor, but it is the surest way I've ever yet found to exterminate these pests, and while our fowls are infested with them they will neither lay eggs nor gain flesh. Watch the sitters closely; lice often causes them to leave their nests and ruin a valuable clutch of eggs.—TRIXIE.

A small black bug never before seen by the farmers is destroying the corn crop in southern Chester County, and in Cecil County, Md. The bug eats the stalk clean to the roots.

Can We Grow Our Own Sugar.

The people of the United States consume at least a million and a-half tons of sugar every year. At present not more than 10 per cent of that amount is produced within our own territory. Cuba produces about 900,000 tons of cane sugar. Germany produces 1,200,000 tons of beet sugar, and other European countries as much more. The total sugar product of the world is a little over six million tons. The world's consumption of sugar is rapidly outrunning the production. In three years it has increased 1,083,000 tons, an average of 361,000 tons per year. Last year the consumption was 6,289,000 tons, and if this year shows the usual increase the consumption will be 6,650,000 tons. Careful statisticians, however, have estimated this year's probable crop at only 6,160,000 tons, of which 3,400,000 tons are produced from beets and 2,760,000 tons from cane. It is evident, therefore, that unless there is soon a large increase in sugar production the demand will largely exceed the supply.

The production of sugar from beets was first begun in France in 1811, under the auspices and direction of Napoleon Bonaparte. It is only within the last 30 years, however, that beets have rivalled and finally surpassed cane as sugar producers. At present continental Europe not only grows its own sugar, but also exports largely, principally to the United States, which is, both absolutely and in proportion to population, by far the greatest sugar consuming country in the world. If Europe can produce her own sugar, why cannot the United States do the same thing? It has been found by experiment that the beets in Germany produce from 8 to 10 per cent. of saccharine matter, and at the latter figure their cultivation is exceedingly profitable.

It has been demonstrated that in the vast dry upland plains of our Western country, where the sun is almost always shining, and where the amount of moisture can be regulated by irrigation, beets will produce at least 18 per cent. of saccharine matter, and it is fair to presume that with proper selection of seed and proper cultivation the percentage could be raised at least to 20. The raising of beets for this purpose has only lately begun in the United States, but the concerns that are now operating are understood to be making some return upon the capital invested.

If Europe, with its limited area and its partially worn-out soil, can raise sugar for its own consumption, certainly this country, with its almost limitless expanse of cultivable lands not yet fully in use and with its virgin soil and its happier climatic conditions, ought to be able to raise more sugar than Europe. There is here an opportunity for capital that is not often presented. The cane sugar supply has about reached its limit. The demand is already in excess of the supply in sight.

Roaches in Brazil.

People who do not like cockroaches had better not visit Brazil. In that country they are found in such swarms as to amount to a plague. Wherever wall paper is used they soon eat it off in unsightly patches, seeking to get at the paste beneath. A correspondent writes to the Department of Agriculture that at Curitiba, on the upper Paraguay, he came across these creatures in a new role. He says:

"In the house where we stayed there were nearly a dozen children, and all of them had their eyelashes more or less eaten off by cockroaches, a large brown species, which is one of the commonest throughout Brazil. The lashes were bitten off irregularly, in some places quite close to the lids. Like most Brazilians, these children had very long, black eyelashes, and their appearance, thus defaced, was odd enough. The trouble was confined to young people, I suppose, because they are heavy sleepers and do not disturb the insects at work. My wife and I sometimes brushed roaches from our faces at night, but thought nothing more of the matter. The roaches also bite off sleeping persons' toe nails. The Brazilians encourage large spiders to live in their dwellings, because they tend to drive away the roaches."

A New Cure for Diphtheria.

The French physicians are having wonderful success in treating diphtheria with petroleum. They swab the throat with it. The treatment presents little difficulty or danger. The swabbing is done every hour or two hours, according to the thickness of the membranes, which become, as it were, diluted under the action of the petroleum. The brush, after being dipped in the petroleum, should be shaken to prevent any drops falling into the respiratory channels. The patients experience relief from the very first application. The disagreeable taste of the petroleum remains for a few moments only.



I KEEP COOL
HIRE'S Root Beer
This great Temperance drink is as refreshing as it is potent.

THE MARKETS.

Review of the Fortnight.

THE TONE OF THE WOOL MARKET.

Justice, Buleman & Co.'s circular says: Wool is dull; prices are weak, and in buyers' favor. Manufacturers are buying only for immediate wants. The recent decline has quickened the demand to some extent. Although quotations are not materially changed the average is a shade lower than last week. The accumulation of supplies in Eastern cities is checked by the fact that commission houses can only make advances on the basis of the probable value of wool in case duties are removed, so that each advance, freight, and charges will not exceed the probable price of wool in case the free wool level is reached. The declining tendency of prices heretofore the greatest on low grades is now less pronounced, as they have already fallen very near to the London price (without duty), if due allowance be made for ocean freight and buying commissions, together with the possible effect upon foreign prices of an increased demand from this side. On Merino grades the tendency is still strongly against sellers, and the belief prevails that nothing can arrest the downward course of the market in the direction of free wool, except some official declaration that present wool duties will not be interfered with.

The demand for buyers' wear, woolsens, has greatly fallen off. Buyers are not disposed to commit themselves to anything but small orders. Duplicate orders come forward with unusual slowness; while rejections of delivered goods and cancellations of previous orders are disagreeably prominent. More reports of the wool trade are "laying off" part of the looms come to hand as manufacturers run out of orders. None of them deem it safe to produce goods to lay in as stock. Business in dress goods is hardly better than men's wear. Thus the chances of a wool trade on foreign woolsens are now being seriously taken into consideration by the clothiers, which is not to be wondered at, as they are already being approached by salesmen from foreign houses with offers of goods on a lower tariff basis; and the uncertainty as to the future explains the general hesitancy to place orders for woolsens, which reacts to an unusual degree on the wool market.

Wool.

Boston, June 28.—There are no new features to report in the market this week. Trade is dull, and the situation is very unsatisfactory. Manufacturers are fairly well represented in the market, but they are purchasing only in small lots, and in some cases are buying only sample bags. Values are nominally unchanged, although at the same time it is difficult to give reliable quotations. Wool is selling for what it brings and that price is merely on a nominal basis. The receipts of new wool are few, but show a falling off as compared with last year. There is no disposition on the part of the holders to force wool for sale, as that would indicate more weakness on their part and send prices even lower than they are now. There is but little wool offered here by dealers, as most of the arrivals have been on consignment. In some cases commission merchants will not be supplied with wool are refusing to receive any wool on consignment even from old customers.

There is very little news from the interior markets. In Ohio there is no buying in the wool sections, where the wool is being asked by farmers, and only a moderate trade is reported in other sections at 20, as these figures are considerably higher for a profit at the season. Prices are also too high in Michigan, although farmers are reported as willing to sell. There are a very few buyers in Indiana, Missouri, and Illinois holders are asking 21, with Eastern buyers holding off for better prices, many claiming that 19 is high enough to pay. There is nothing new to report in the Texas market. At all points the stocks have accumulated, and as buyers are few, sales are small. Utah farmers are asking 22.50, but not many buyers are found at these figures. In fact, buyers are scarce, and wool is accumulating at all points very rapidly. In Montana the clip has commenced to move, the bulk of the shipments being on consignment. The San Francisco market is dull and unchanged. The interior market is very quiet. Prices are nominally the same as the sales are being made at, but a basis for quotations. For straight XX wool 22 is the average asking price, with X at about 24 per pound. Dealers are asking 22.50 for Michigan X wools, with limited sales. There is no change in washed combings and delaines. A small lot of fancy, unwashed delaine sold at 24. The very favorable crop reports and large receipts, together with the action of wheat, all tend to depress the market. The market is close and has lost all. Provisions are only slightly changed from last night after many fluctuations within a moderate range. Trade was on the whole light and spasmodic.

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